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Introduction

This qualitative study examined how instructors used a commercially-produced online course to teaching a theories course in counseling. The instructors used three basic course formats: completely online, face-to-face, and hybrid. The study was conducted during the semester in which the course was being taught. This made it possible to access to course websites and to the instructors themselves, both as they prepared to teach the course and as they taught it.

The overview of the problem provides the context for online teaching in higher education today, the online learning environment, and the social aspect of learning. The second half of this chapter covers the need for the study, the call for research, the purpose of the study, a list of definitions, and the research and assumptions addressed in this study. The chapter concludes with a description of the online course interface.

Overview of the Problem

According to the Sloan Report, student enrollment in online learning in higher education in the U. S. is increasing more rapidly than overall enrollment *(Allen & Seaman, 2007)*. In the fall of 2006, 3.48 million higher education students were enrolled in at least one online course. More than two-thirds of the institutions included in the survey reported some form of online offerings. Although the largest group of students enrolled in online courses (1,904,296) were at the associate’s degree level in 2006, master’s level enrollment was roughly one-third that size, numbering 686,337 students.

Universities encourage online instruction as a way to reach underserved populations and to increase income for the university *(Morgan, 2003)*. One way university administrators have supported instructors is to offer course management systems to make the mechanics of online teaching easier. A course management system, such as Blackboard, provides the computer interface that online students use to access course materials and interact in the course, and the functionality for the instructor to design the course, communicate with students, post grades, and receive assignments online.

Industry experts have estimated that more than 90% of U.S. colleges and universities use course management systems *(Copyright Compliance Center, 2005)*. Critics of course management systems have claimed that although they may help instructors manage the administrative details of online teaching, the systems actually restrict the range of student participation to fit within the program's templates. Bonk and Dennen (2003) criticized current online courseware for providing "templates and guidelines for warehousing students and providing static course material" (p. 330). What instructors asked for was more training in pedagogical methods that fit with web-based teaching and more tools that fostered students to think critically and creatively.

In the online environment, it can be more difficult to ascertain the emotional engagement of the learner than in face-to-face instruction, where verbal and nonverbal feedback are provided both voluntarily and involuntarily *(Kreijins, 2003; Schwartzman, 2006)*. In an online course, the learner using asynchronous text-based communication has a significant amount of control over the impression he or she creates *(Kreijns, 2003)*. The instructor could find it challenging to sense the mood of the group and understand how well an explanation is received. Furthermore, if there is to be a social environment in an online class, the instructor must intentionally construct and continually support it *(Kreijns, 2003; LaPointe & Gunawardena, 2004)*. Blended learning, or courses that combine the elements of an online course with those of face-to-face instruction, has become a significant mode of teaching in U.S. higher education in recent years. The measure of blended learning cannot be determined from college enrollment data, however, because it often appears identical to face-to-face classes on many institutions' reporting systems *(Allen, Seaman, & Garrett 2007)*. Instead, in their exemplary study of blended learning published by the Sloan Foundation, Allen, Seaman and Garrett gathered data on blended learning through survey instruments based on opinion issues from both academic leaders and consumers of blended learning. The findings showed that blended learning is not merely part of an institutional migration strategy from face-to-face to online learning, but it stands as a discrete option for teaching in its own right. Online courses were found to be more prevalent than blended courses, with the number of online courses growing and the number of blended courses shrinking slightly. The study also revealed that there is great growth potential in the market for online and blended delivery. Consumers reported a preference for online and blended delivery that far exceeded reported experience, and expressed an openness to try both.

The Purpose of Study

The purpose of this qualitative study was to find out how instructors in higher education taught with a web-based courseware that encompassed an e-textbook and a course management system. Factors that related to the instructors and their teaching environments were examined to understand their influence on the participant’s course design and methods of teaching. In particular, this study focused on how they used online resources from the textbook publisher’s course website and the reasons why. Some of the personal factors examined were the instructor’s teaching experience, their comfort level with technology, their teaching philosophies, the influence of their mentors, and their goals for teaching the course. Factors relating to the teaching environment included the course format and the support and training provided by the university for teaching with technology.

The instructors who adopted the courseware were interviewed at intervals during the semester: while they were in the process of setting up their course websites, beginning to teach the course, and at the end of the semester. Data was collected on their initial ideas for their course design, mitigating circumstance that caused them to modify their plans, and their reflections on how they taught the course.

Research Questions

In qualitative research, the researcher develops ideas about the research problem through reading the literature of the discipline and through personal experience in the field. However, it is expected that the focus of one’s research might change significantly in response to themes that emerge from the data. To give focus to this study, four basic research questions were pursued:

1. Who were the instructors who opted to adopt the Online Day textbook package and what motivated their adoption?
2. How did they teach the course?
3. To what extent did they use technology in teaching?
4. What kinds of successes and failures ensued in teaching the course?

The participants in this study were graduate-level instructors from various universities in the U.S. who adopted an online counseling theories textbook. Because the instructors used the same basic materials, their methods of designing instruction and teaching the course were clearly comparable.

Definitions of Terms

A number of terms used in this chapter have different meanings in different contexts. For the sake of clarity, I have defined the terms as they are used in this study.

- **Blended or hybrid course**“Course that blends online and face-to-face delivery. Substantial proportion of the content is delivered online, typically uses online discussions, and typically has some face-to face meetings” *(Allen & Seaman, 2007, p. 4)*.
- **Online course** “Course where most or all of the content is delivered online. Typically have no face-to-face meetings” *(Allen & Seaman, 2007, p. 4)*.
- **Course management system** “A software system that is specifically designed and marketed for faculty and students to use in teaching and learning…most include course content organization and presentation, communication tools, student assessment tools, grade book tools, and functions that manage class materials and activities” *(Morgan, 2003)*.
- **E-learning** “The use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services, as well as remote exchange and collaboration” *(European Commission, 2001)*.
- **E-textbook** a digitized version of a textbook designed with functionality for flexible use by the reader online, such as the ability to click on a term and hear a term pronounced while reading its definition.

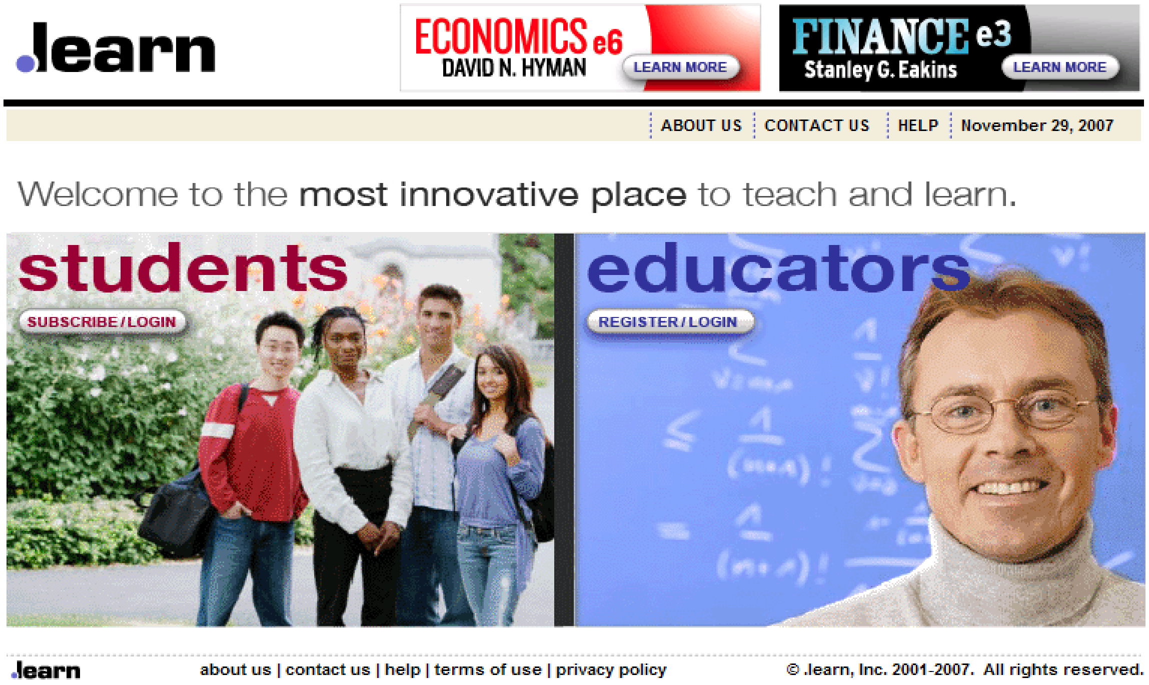
- **Courseware** software designed to use in teaching.
- **Online Day** a website containing an e-textbook built into a course management system which has been enhanced with various educational resources and communication tools, such as a discussion board, a linked glossary, PowerPoint presentations, audio segments, videos of counseling sessions, an automated test bank, and an instructors’ guide.

The Online Day Course

In order to make the context of this study clear, an overview of the software is presented in this section. The online resources included the electronic version of the textbook *(Theories and Design of Counseling and Psychotherapy by Susan X Day)*, video case studies, a bank of multiple choice test questions, PowerPoint slides which outlined each chapter, an interactive audio glossary, and voice recordings of the author explaining key concepts.

The textbook publisher, Houghton Mifflin/Lahaska, had employed an educational software company, Intellipro, to do the work of converting the textbook to an e-textbook, to incorporate the new multimedia components, and to provide the course templates in a proprietary course management system. The course website had two points of entry, one for students and another for educators. The educators’ version allowed instructors to build and manage the course components in addition to being able to see and use all the functionality provided the students.

The Intellipro website interface, learn (http://www.dotlearn.com), was visually appealing.

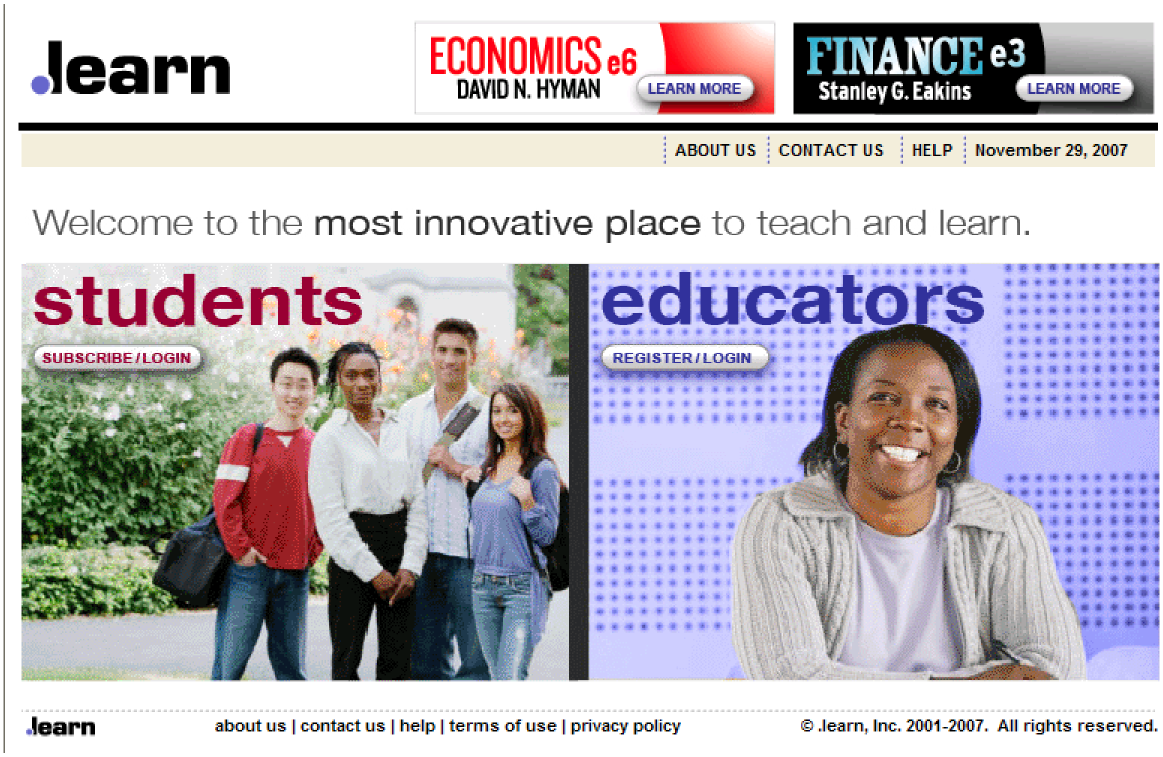


Welcome to the most innovative place to teach and learn.

© .learn, Inc. 2001-2007. All rights reserved.

Figure 1. Frontpage for Online Day website showing version with male instructor.

The educator button showed an alternating image either of a smiling short-haired male with wire-rimmed glasses in front of a blackboard with calculations on it, or a smiling black female seated at a desk in front of an abstract blue background. These two images cycled each time the page was opened.



Welcome to the most innovative place to teach and learn.

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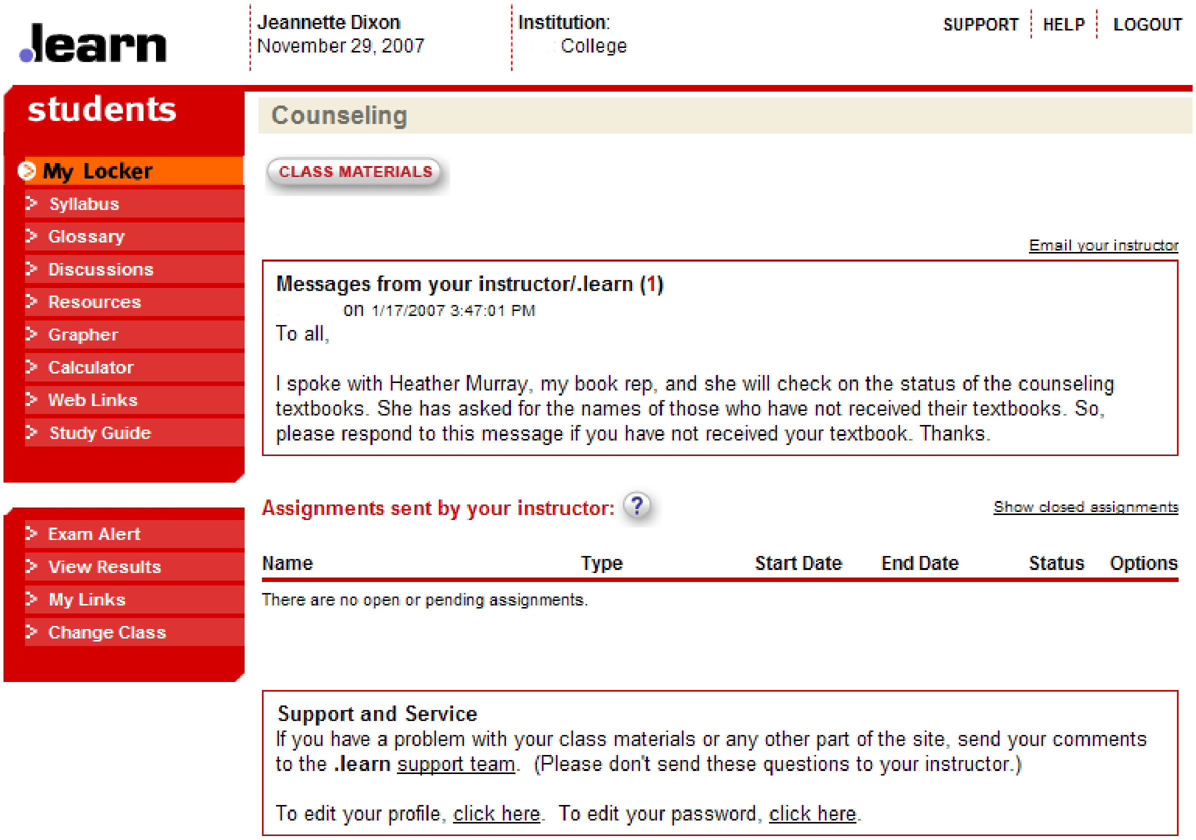
Figure 2. Frontpage showing female instructor.

To log in, all that was needed was the course number, which was assigned to the course when the instructor registered with Intellipro to teach with Online Day. The students went through one additional process to enter the course the first time. To register for the course they had to commit to the way they would pay for it. Along with the 180 day subscription to the online version, they were sent a hardback copy of the textbook though the mail. To navigate through the website, one simply by makes choices from menus, or clicked on linked terms.

The Student Interface

The students' main page, "My Locker," was simple to navigate with a menu in the left margin that remained constant.



Jeannette Dixon
November 29, 2007

Institution:
College

Counseling

Messages from your instructor/.learn (1)
on 1/17/2007 3:47:01 PM
To all,

I spoke with Heather Murray, my book rep, and she will check on the status of the counseling textbooks. She has asked for the names of those who have not received their textbooks. So, please respond to this message if you have not received your textbook. Thanks.

Assignments sent by your instructor:

Name	Type	Start Date	End Date	Status	Options
There are no open or pending assignments.					

Support and Service
If you have a problem with your class materials or any other part of the site, send your comments to the **.learn** support team. (Please don't send these questions to your instructor.)

To edit your profile, click here. To edit your password, click here.

Figure 3. The students' main page on the Online Day website.

The main features for the students were listed in the upper red box:

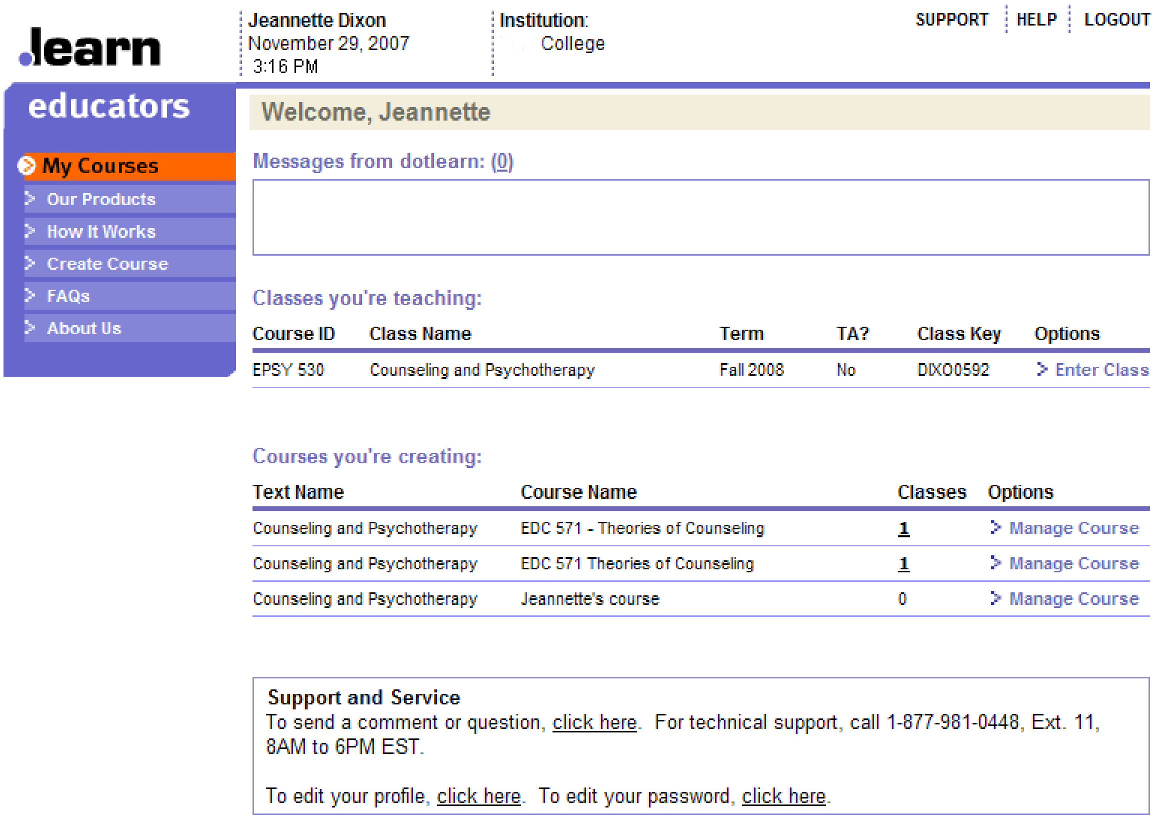
- The *Syllabus*, which included the schedule for class meetings, assignments, and exams, was a key element that explains the structure of the course. The majority of the participants' syllabi included class rules, university policies, rubrics for each assignment, and how grades were calculated for the course.
- The *Glossary* was taken from the e-textbook, and could also be accessed from highlighted words within each chapter.
- The *Discussion* page was set up for the instructor to post a topic and the students to post their responses asynchronously.
- *Resources* linked to the digital materials not provided in the e-textbook, such as the case videos, the PowerPoint presentations, the

illustrations, the core case descriptions, and the primary source articles, grouped by chapter.
- The *Study guide* contained several useful features, including “Chapter highlights” and “Self-quiz.”

The two other features listed, *Grapher* and *Calculator*, were not cogent to this course. They were vestiges of the course management system template that was created for math, science, and business courses. The *Calculator* was a working Java application, but the *Grapher* feature did not display any content.

The Educator Interface

The educator main page was titled, *My Courses*. From this page, the instructors could link to templates to add content to their courses, and manage the delivery of the assignments, announcements, and tests. Some of the functionality included personalizing the interface, re-ordering the chapters in the e-textbook, and posting discussion board topics.



Jeannette Dixon
November 29, 2007
3:16 PM

Institution:
College

Welcome, Jeannette

Messages from dotlearn: (0)

Classes you're teaching:

Course ID	Class Name	Term	TA?	Class Key	Options
EPSY 530	Counseling and Psychotherapy	Fall 2008	No	DIXO0592	> Enter Class

Courses you're creating:

Text Name	Course Name	Classes	Options
Counseling and Psychotherapy	EDC 571 - Theories of Counseling	1	> Manage Course
Counseling and Psychotherapy	EDC 571 Theories of Counseling	1	> Manage Course
Counseling and Psychotherapy	Jeannette's course	0	> Manage Course

Support and Service
To send a comment or question, click here. For technical support, call 1-877-981-0448, Ext. 11, 8AM to 6PM EST.

To edit your profile, click here. To edit your password, click here.

Figure 4. The instructors' main page on the Online Day website.

In the center of the *My Courses* page, there were two grid-like sections; the top one, "Classes you're teaching," listed the current course. By clicking on "Enter Class," the *Class Materials* page opens, showing the list of assignments and tests created. From this list, the instructor may view, resend, or reset an existing assignment.

The lower section labeled "Courses you're creating," linked to the *Manage Course* page. This is the where the instructor actually created the content for the course. The functions for creating and maintaining the course website were split between these two sections.

Although specific data about specific individuals in the field of counseling psychology are reported, the findings are relevant to the study of online teaching in other disciplines as well. As in all qualitative research, the goal of this study was to provide rich examples of real experiences that could be taken at face value and which the reader could abstract relevant meaning to their own life experience, present, past, or future.

LITERATURE REVIEW

This study will examine the teaching beliefs and practices of instructors using online courseware to teach graduate-level courses at a variety of colleges and universities in the U.S. The review of the literature consists of two parts: the online social environment and course management systems.

In the first section, the focus is the interaction in the online learning environment based. The two main topics included are the nature of asynchronous text-based communications and the use of course management systems. How the course management system shapes the course design and the communications conducted within the course is explored.

The Online Social Environment

Kreijns, Kirschner, and Jochems (2003) found that because the online environment has the tools to build social context, many have mistakenly assumed that social interaction would automatically occur. The instructor must intentionally design activities and situations so the students to get to know each other at a distance. Students need to get to know their classmates and instructor through off-task communication in order to build trust. Walther’s study (1992) indicated that time spent engaging in social, non-course related communication within the online class context helped break down barriers between class participants with each other and with the instructor.

Before students will engage willingly in collaboration, they must trust one another, feel a sense of belonging, and feel close to each other (*Rourke, 2000*). They need to feel that they will be treated sympathetically by the instructor and fellow students. If the instructor limits interactions to the cognitive content, feelings of trust may not develop. Students will likely feel anxious, defensive, and unable or unwilling to risk being vulnerable to exposure necessary to the learning process (*Kreijns et al., 2003; Rourke, 2000*).

Faculty recounted that feedback is essential to cultivate the learning experience, as well as foster the connections to the institution (*Lewis & Abdul-Hamid, 2006*). In face-to-face learning environments, students can develop confidence in participating in class discussions by making social comparisons to the performance of other students (*An & Kim, 2006*). However, due to the lack of immediacy of feedback as well as the lack of cues such as facial expressions and body language in the asynchronous online course, it takes longer for students to develop trust and confidence with their peers than in face-to-face classes (*Walther, 1992*). Instructors report that learning takes longer using computer-mediated communication and less material can be covered in a semester in the asynchronous, online environment (*Kreijins. 2003*).

Online Communication

Communication patterns between teacher and student are different in the online environment using text-based asynchronous communication from face-to-face interactions. The instructor must carefully craft instruction and model good communication to help the students build the affective realm of the online class. Trust building in online environments that takes place early in the semester through off-task social communication can increase feelings of trust, a sense of warmth and belonging, as well as closeness among the participants (*Rourke, 2000*).

The instructor’s teaching style and ability to communicate the proper tone are vital to creating a supportive atmosphere. Exemplary online faculty reported using an introductory conference through postings to the class discussion board and maintaining strong class interaction through formal and informal conferences, chat rooms, and email (*Lewis & Abdul-Hamid, 2006*). These instructors made use of explicit rubrics for grading online contributions, but also allowed a certain amount of social interaction. They would step into the conversation when it seemed to wander off course, or when someone made a very good point, to direct the discussion in a new direction or to explore the issue in more depth. Over time, online students are able to individuate impressions of others through accumulated messages when given multiple opportunities to read and respond to postings (*Kreijns, 2006*). This is essential in developing social relationships, group cohesion, and trust, necessary to defining the affective structure which promotes and reinforces social interaction.

In online teaching, the amount of time spent engaging with students is often greater than in face-to-face teaching, due to the number of individual emails received and the time spent in monitoring of online group discussions (*Anderson, 2003*). Instead of one-to-many, the instructor is often communicating one-to-one. A recent study shows that students continue to prefer communicating through private email with their instructors and fellow students than using the class discussion boards or chats (*Gahungu, Dereshiwsky, Moan, 2006*). The online instructor is challenged to channel students' communications to group email or discussion boards, where they can learn from each other (*Anderson, 2003*). The use of group communications helps develop a sense of community, because frequent communications help students get to know and trust one another (*Alonzo, Lopez, Manrique, and Vines, 2006*).

Setting the Tone

The instructor sets the tone of the online learning environment through the kind of support provided to the students, and the degree to which the instructor engages with them. The emotional context for learning is dependent on the online instructor's understanding of how to communicate in both the cognitive and affective realms. It is a challenge to design instruction to meet the needs of the variety of students who will enroll (*LaPointe & Gunawardena, 2004*), students whom the instructor may not have met before. Instructors are also faced with the need to motivate students without the usual toolbox they use to motivate a face-to-face class. Limited to asynchronous, text-based communications, the instructor must learn how to convey emotion without using tone of voice, emphasis on certain words, body language, eye contact, and the ability to "read" students' reactions (*Schwartzman, 2006*). The instructor's tone is expressed through text, requiring an explanation of the intention of the sentence. Certain conventions may be used, such as when online communicators express humor through stating “just kidding,” or using the emoticon ;-) indicating a wink, or typing LOL, a shorthand for laughing-out-loud (*LaPointe & Gunawardena, 2004*).

Course Management Systems

Over the past decade, higher education has invested heavily in course management systems (CMS) which serve as the teaching environment for online distance education (*Morgan & Schlais, 2005*). Students can log into the course at any time, and the course materials are continuously available to them. In these systems the functionality, as well as the look and feel of the online course environment, is largely predetermined by the software (e.g., Blackboard). A course taught entirely online allows the participation of students who work full-time, live far away from campus, or simply prefer to learn at home. Faculty members are often encouraged to teach online courses or to blend online instruction with face-to-face classroom instruction. From a university administrator’s perspective, a real advantage of online instruction is the ability to enroll more students without having to build more classrooms (*Bonk & Dennen, 2003*).

Online Courses

Research shows that tenured professors who had never taught a distance education course became engaged with the idea when an increased demand for online learning coincided with the university-wide adoption of course management systems, making web-based instruction much easier than before (*Bonk, 2006*). However, instructors have become aware of the multiple levels of complexity in learning environments as they attempt to translate an existing course into a web based version (*Sawyer, 2000*). They are learning that trying to create an online course by doing a one-to-one translation of materials from one teaching medium to another is not adequate.

However helpful the CMS is to helping professors manage large classes of online students, teaching online requires different teaching strategies from those of the traditional classroom. Text-based asynchronous communication in online courses has largely replaced lectures, discussions, and printed hand-outs. In a recent survey of factors important to successful online teaching, instructors' need for an online pedagogy ranked significantly higher than their need for technical expertise (*Bonk & Kim, 2006*).

Malikowski, Thompson, and Theis (2007) developed a model for research on course management systems based on five categories: (a) transmitting course content; (b) evaluating students; (c) evaluating courses and instructors; (d) creating class discussions; and (e) creating computer-based instruction. The study found that the instructors most frequently used the CMS for transmitting course content such as the syllabus, readings, and assignments. A second most used form of transmitted content was announcements created within the CMS, followed by the built-in grade book. Two of the categories moderately used were evaluating students through online quizzes and creating class interactions through discussion boards. The CMS was rarely used to evaluate course and instructors or for computer based instruction.

In a study that examined faculty adoption and implementation of features from Blackboard, West, Waddoups and Graham (2007) found that instructors rarely adopted all of the features of a course management system; instead they chose a feature at a time and re-evaluated the use of the features. Overtime, they experienced technical or pedagogical challenges. Some grew more comfortable with the tool and tried adapting it to support different pedagogies. Depending on how successful the instructor was in overcoming implementation challenges, the instructor chose one of three paths: to continue to use the tool or some of its features, to scale down their use of the tool or reduce the number of features used, or discard the tool completely in favor of other options.

Ely (1999) found eight conditions that contributed to instructors' successful implementation of educational technology: dissatisfaction with the status quo, existence of knowledge and skills, availability of resources, availability of time to learn the technology, existence of rewards or incentives to try it, participation in deciding how to implement the technology, commitment to the process, and continuing support from the leadership that showed enthusiasm for the work at hand.

Hybrid and Blended Instruction

Hybrid and blended courses combine the features of online and face-to-face instruction. For instance, students might attend classes at the university every other week, alternating with participating in an activity, such as watching an educational video and posting their responses to the class discussion board. The following week the students would meet face-to-face, where the teacher begin the class by leading a discussion about ideas expressed online. This method encourages students to watch the video on their own, allowing the instructor to use valuable class time for other activities.

Students are able to stay connected between class meetings through required online communications. Instructors report getting to know students better through the use of online discussion boards, where students are required to contribute their thoughts, than in a face-to-face class where some students do not speak up in discussions (*Morgan, 2003*). Instruction varies widely within hybrid and blended learning, but both instructors and students have reported positive opinions of blended instruction, to which some faculty attributed increased communications with students (*Gahungu, Dereshiwsky, Moan, 2006*). The following chapter explains the framework and methodology used to study how the instructors engaged in teaching with the Online Day courseware.

Methodology

This qualitative study examined how college instructors taught a course using courseware. The goal of this research was to understand better how faculty go about the teaching of a course that incorporates the use of a particular courseware. My research questions were:

1. Who were the instructors who chose to adopt the courseware, and what were their motivations for adopting it?
2. How did the instructors introduce the online aspects of the course to the students?
3. How and to what extent did the instructors use the courseware in teaching?
4. What kinds of successes and failures ensued in teaching the course?

Qualitative Methods

Qualitative research methods were employed in this study to find answers to these questions. According to Hill, Thompson, and Williams (1997), the quantitative research paradigm is not adequate for investigating novel, complex phenomena. Qualitative research allows the researcher to examine naturally occurring phenomena in situ, and to describe it in depth and richness. While quantitative research begins with a hypothesis, the qualitative researcher seeks to discover the research questions in the course of data collection and analysis.

In discussing qualitative research, Berg (2004) states, “Quality refers to the what, how, when, and where of a thing—its essence and ambience. Qualitative research, thus, refers to the meanings, concepts, definitions, characteristics, metaphors, symbols and descriptions of things” (*Berg, 2004, p. 2-3*).

The experiences of the participants were explored to try to understand how their self-perceptions as teachers intersected with their teaching methods.

To find out about their self-perceptions, the interview questions were open-ended. To compare with the interview data, the course syllabi from the course website and a few of the online discussions were examined. By studying a small number of individuals who were involved in online teaching using the same courseware, the focus was on their teaching goals and methods rather than the course content.

Research Design

The comparative case study method was used to establish the overall framework to follow throughout this study. A small number of participants were studied for the purpose of cross-unit comparison (*Berg, 2004*). For each participant, two or more interviews were conducted using the same protocols to insure the collection of like data that could be compared across cases. However, using grounded theory, the bounds of strict comparative case methodology were extended to be able to incorporate data from informal phone calls and data from the course websites, such as the course syllabi and class discussion boards. Including these additional sources of data allowed a more complete picture of each participant’s context first hand, “grounded” in the complexities of their lived experiences in a social context.

The Participants

The participants in this small, non-randomized sample were chosen for this qualitative study because of their involvement in a particular specialized learning environment. They were all teaching graduate-level courses based on the textbook *Theory and Design in Counseling and Psychotherapy,* by Susan X Day. The adopters were teaching at various colleges and universities around the U.S. There were thirteen instructors who adopted the online version of the textbook during the same semester. All the adopters were invited to participate in this study, and nine accepted. Pseudonyms were used to replace the names of participants and if mentioned, any staff with whom they worked.

The Instrument

In qualitative research, the researcher is the instrument. However, in the comparative case study method, the interview questions are, in effect, instruments themselves. It is important to ask the same questions of all the participants, in order to later categorize and compare responses.

At least two semi-structured interviews were conducted with the instructors who adopted the e-textbook package. The first interview took place early in the semester. That interview protocol covered who they were, why they had chosen the e-textbook, their previous teaching experience, their comfort level with computer technology in teaching, the context of their teaching at their individual institutions, the level of technology assistance availability, their personal vision for teaching with technology, and their teaching beliefs (see Appendix A). Additional interviews were conducted when needed to cover the questions on the interview protocol.

At the end of the semester, the participants were interviewed a second time. That interview protocol asked what was it like for them to teach with the courseware, how they designed instruction, what they might change about it if they were to teach the course again, and their reflections on the experience (see Appendix B).

Data Collection Procedures

Several methods of obtaining data for this study were incorporated, including semi-formal interviews, informal telephone discussions, emails, and documents created by the participants. In checking a couple of the participants’ course websites, the focus was on their actual course designs, their use of online resources, their communications with students, and the students’ contributions to discussion boards. By combining interview with spot checks of the course websites, both the instructors’ intentions as well as their practice of online teaching were captured.

Lahaska Press (an imprint of Houghton Mifflin), the publisher of the Online Day, provided a list of potential participants who signed up to adopt the e-textbook package for teaching. The Lahaska Press staff called each new adopter to welcome him or her, and mentioned the services of a telephone advisor (the primary researcher) to assist him or her in learning to use the course management software and e-textbook materials as part of technical support provided (see Appendix C). Lahaska staff included a letter of introduction to each new adopter with contact information along with some other information about the course. To personally establish contact with the instructors, the primary researcher who provided the telephone support sent an email to each instructor explaining this study and asked if they would consider participating (see Appendix D). The researcher followed up with those interested by sending them the letter of consent for them to sign and mail back (see Appendix E).

The researcher kept a research journal to record notes from the interviews with participants and with the author, publisher, and software developer. The researcher made notes of questions raised, topics discussed, recommendations made, and actions taken. All email communication between the researcher and the adopters were password-protected to insure the confidentiality of the participants.

All of the data was collected by telephone, through the Internet, or by mail. The researcher met one of the participants and her supervisor in person at a professional conference prior to doing the interviews.

Data Analysis

In the present study, the basic framework used was modeled on consensual qualitative research methodology (*Hill et al., 1997*). A research team was brought together by the primary investigator, consisting of two graduate students in instructional technology and an outside expert working in the field of instructional technology, Dr. Ann Jenkins. Dr. Jenkins obtained her doctorate in 2001 from the College of Education at the University of Houston. She has been working for six years in the area of web accessibility.

The primary investigator, along with the two graduate students, coded the process of coding the raw data. All the interview data was read and coded by each member of the research team. The team identified common themes and recurring concepts.

The research team members brought to this process their own unique life experiences, cultures, and understandings of the meaning of words. Their input provided a check on researcher bias. The team worked toward consensus on the naming of the data categories. This process helped define language that would be more widely understood by the study's audience.

The outside expert examined the final list of category names to see if they fit with her experience with the issues in the field. The expert offered an opinion based on her experience from both her scholarly background, and most importantly, from her work experience in instructional technology. She did not challenge any of the categories.. The outside expert provided a check on the misnaming of categories, as well as a check on "group think" (*Hill, 1997*). And finally, a member check was conducted by sending them the list of categories and gathering their responses.

Consensual Qualitative Research, like grounded research, is well suited to use with a group of relatively homogeneous cases to find themes that run across all of them, which when seen together, can help draw a clear picture of a shared phenomenon. Grounded theory was used, which is based on the assumption that people construct their own realities through social interactions using shared symbols (such as words, clothing and gestures) to communicate meaning (*Fassinger, 2005*). Grounded theorists have studied these meanings created through social relationships, seeking to discover how groups of people have defined reality based on their understandings of interpersonal interactions (*Cutliffe, 2000*). Grounded theory grew from the roots of sociology, but is currently widely used by researchers in fields such as nursing, psychology, business and education. *Consensual qualitative research* (*Hill, 1997*) has been widely used in humanities and social science research.

The following summary of qualitative content analysis describes the stages of the process:

- Research questions were identified.

- Data was transcribed, read, and sorted into grounded categories representing themes and motifs that re-occur to the point that observers take note of their prominence.
- The data category names were reviewed by the research team and reworded to apply across multiple cases.
- Consensus for category naming was achieved.
- Categories were reviewed by an outside expert in the field.
- Data was reviewed for emerging patterns.
- Patterns were examined in the light of relevant theory and other research.
- An explanation of the findings was offered.
- The analysis related the results to the extant literature on the topic (*Berg, 2004, p. 285*).

Data was triangulated in this study by collecting data from a variety of sources, such as semi-structured participant interviews, informal telephone conversations, and documents from the participants' courses. Another form of triangulation occurred in the data analysis phase through the work of the members of the research team. As with all qualitative studies, the results took shape over time through an iterative process of examination of the data in search of commonalities, differences, and patterns.

The expert, the research team, and all of the participants examined the list of final categories and agreed that the themes that emerged from the data seemed to be true to their experience or understanding of the data. As one of the participants, Ken, stated, "Your themes certainly captured my experience. I couldn't think of anything to add and didn't see anything that didn't, or couldn't, resonate." Another participant, Mark, remarked, "The themes look good to me. As far as the issues I raised, I think you were accurate and complete." Another, Neal, wrote, "I read the themes and I agree with the summary comments. Well written, informative and factual. Thank you for asking me to participate in your research."

The final report of this study took the form of a narrative account. Direct quotations gave voice to the individual participants, and gave the reader direct access to the participants' words. In the reporting of results, important details were included to provide what Berg (2004) refers to as “thick data.” According to Berg, if well described, the findings “should not only fit the specific individual, group, or event studied but also generally provide understanding about similar individuals, groups, and events….Few human behaviors are unique, idiosyncratic, and spontaneous” (*Berg, 2004, p. 259*).

FINDINGS

The purpose of this study is to find out how the participants taught using an innovative online instructional package. For this chapter, the researcher sought to find out whether the instructors used the online materials as supplementary to their classroom teaching, or as a core resource to teach a hybrid or online course. The study looked at the instructors’ teaching experience, their teaching contexts, and motivations for using the software to inform how they taught with it. The goal of gathering this information was to determine some common factors that influenced their choices in how they taught with Online Day, which will be explored as themes in the final chapter.

This chapter consists of descriptions of each of the nine participants and how they taught the graduate-level course, *Theories of Psychotherapy and Counseling*. Before looking at the individual accounts, the researcher offers a view of the characteristics of the group as a whole.

The nine instructors had adopted the Online Day textbook and resources to teach the theories course. They all had doctoral degrees. Eight taught at the graduate level, and one taught at the undergraduate level.

In the following chart, selected characteristics are displayed under the instructors’ names. These characteristics are their teaching experience, sex, counseling experience, state in which they teach, and whether the institution is supported by state or private funds.

Name	Teaching	Sex	Counseling	Region	Institution
Laura	3 years	female		Northeast	private
Lyle	4 years	male		Deep South	state
Nancy	6 years	female		Mid-Atlantic	state

Ken	6 years	male	30 years	Northeast	private
Carrie	10 years	female		Midwest	private
Miller	12 years	female		Northeast	state
Neal	12 years	male	22 years	Plains	private
Ed	18 years	male	39 years	Southwest	state
Mark	30 years	male		Deep South	state

Descriptive information on the participant’s teaching and counseling experience, age, sex, state, and type of institution where they taught.

Figure 5 indicates that five of the instructors were men, and four were women. Over half of the participants were very experienced, having taught for between 10 and 31 years. Three had worked as therapists in addition to their university teaching. There was a wide geographic spread, with no two instructors living in the same state.

The following section contains pedagogical biographies for each participant, including personal information and information about the context of their work. These accounts contain personal information that influenced how they taught, such as their mentors, their philosophy of teaching, their attitudes toward technology, and professional activities with which they were involved besides teaching. The contextual information concerned their technology training, their colleges, departments, supervisors and colleagues, and the format in which they taught the course.

This data was collected through interviews conducted over the telephone with each of the instructors individually at two different points during the semester. In qualitative research, it is standard practice to work from a list of common questions for each interview; however, responses to these open-ended questions are unique, and often lead to other cogent topics. One such instance of a topic generated within the conversation was the differences in university policies regarding the kind of orientation given to online students. The instructors’ personal accounts revealed information about their experience of teaching the same course in the same semester using the same textbook and online resources.

Each pedagogical biography includes short excerpts of the participants’ own words so the reader can become familiar with their ways of expressing themselves, and more importantly, quotations are the data of qualitative research. Unfortunately, some of the emotional content of their words is lost to the reader, who cannot hear the intonation of their words. Instead, this type of information is provided through reflective comments on these conversations. Their stories about teaching are presented here through the filter of the researcher’s point of view. The researcher brings to the interpretation of events her own experience with instructional technology, her teaching experience, and research studies in both education and psychology.

What follows is a group of nine different stories that provide insight into who these instructors were, how they taught, how they used instructional technology, and why. The biographies are ordered by the number of years the instructors had taught in the field of counseling psychology, from least to the most.

Laura, The Reluctant Adopter

Teaching Experience

Although Laura had taught at the graduate level part-time for two years, this was her first year of full-time teaching. She was part of a small staff that made up the counselor education program of a private college in New England.

Course Format

Laura taught the theories of counseling and psychotherapy course face-to-face. Laura expressed two major concerns in teaching the theories course: learning to use a variety of teaching techniques, and figuring out how to prepare the students adequately for the professional licensing exam, which all the students would have to pass to become certified. In her words:

"A challenge to me as a new professor is to walk the line between providing all of that detail in class, speaking at breakneck speed from the beginning to the end, and relying on students to learn that detail on their own."

Philosophy of Teaching

Laura’s philosophy of teaching centered on identifying and building on students’ strengths. She described herself as “a connected and relationship-oriented kind of a professor.” Laura’s professional mission was to help her students learn about, join, and participate in professional organizations. Her high level of activity in this area was partially motivated by her need to build a portfolio of activities toward tenure requirements. She received support for her coaching of students in professional activities by her supervisor, who also coached her in developing her pedagogy.

Teaching Methods

Laura’s teaching methods were greatly influenced by her mentors in graduate school, who taught in a strictly conventional lecture format. She considered her main strengths to be the ability to convey their interest in and enthusiasm for the subject, to show concern for the students, and to use every minute of class time in carefully prepared and structured lectures.

With encouragement, however, Laura was learning to extend her repertoire of teaching strategies to fit with different learning styles.

"My colleagues here are helping me to appreciate that sometimes the very best teaching is not where the students are spoon fed every detail or presented with every fact. But instead, teaching can be directed more from the perspective of being a reflective practitioner, helping students use experiential methods. I’m learning from my mentors to rethink my teaching style, and to develop and grow. It’s exciting."

Discovering Online Day

Laura described how she had found about the Online Day course materials:

"I’d taught the theories course in the spring the year before. I was getting ready to teach, and I knew I was going to teach it this time again. My boss, Rick Halstead, learned about it through a conversation with someone at Lahaska, I’m not sure how their conversation began. I was walking by his office, and he said, “Laura, guess who I’m on the phone with!” And actually, it was great. We were able to look right online as we had a conversation so we could see what the website looked like and all."

Laura had not been looking for a new textbook. However, her supervisor was trying to help Laura try new teaching methods. To a certain degree Laura’s motivation was extrinsic, in that she wanted to please her supervisor by adopting the new technology and changing her teaching style. On the other hand, she was motivated to increase her repertoire of teaching skills in order to increase student engagement.

How She Taught

Laura primarily used the Online Day resources to supplement her lectures and class exercises. She confided that it was a challenge for her to learn to incorporate instructional technology with her classes.

When Laura taught the theories course previously, she had used a different textbook. Several times she mentioned some dissatisfaction with the Day text, often comparing it to the text with which she was more familiar. She vacillated between going back to the old textbook and staying with the new one for the following semester.

Attitude toward Technology

Laura’s tentativeness about using the online content from the Day website did not prevent her from making use of technology with her class, however. She went outside the offerings in Online Day to bring in other technological tools and techniques. Although Laura did not make use of the PowerPoint slides on the website, she accompanied several of her lectures with PowerPoint slides she had made for a course she had taught before. She emailed the slides to the students the week before the lecture so they could print them out and bring them to class to assist them with note taking.

One assignment Laura created involved fairly sophisticated use of technology. She assigned the students to work in small groups to create videos demonstrating a specific theory of counseling. These videos were later presented to the class to stimulate discussion. She reported that the students really enjoyed the activity, and encouraged her to use it again with her next class.

Technology Training at Conferences

In a workshop she attended at the American Counseling Association conference, Laura learned of a website developed at Kent State (www.counseloraudiosource.net) that contained podcasts created by current practitioners and theorists. Laura found them so informative and enjoyable that she introduced the website to her students that semester. Some of them found the podcasts extremely interesting. Laura later signed up to create two podcasts herself. She felt the workshop had given her a number of useful technology application ideas that were both relevant and easy to integrate into her teaching. Laura stated that she felt the best place to receive professional development in teaching with technology was at conferences specifically targeted to her subject area. She emphasized that she had set aside the time to learn new things at the conference, which she found difficult to do with her busy school schedule on campus.

Concern about Online Day

A major complaint Laura had about the online Day material was its ephemeral quality; it was available to the students during the course and for a limited time only afterwards. She felt this was a problem, because the students might use it to review for the licensing exam which was two years away. The students had all received a hardback copy of the textbook along with access to the website, but Laura thought the ability to drill with the test bank questions would help them right before taking the test.

Laura wanted to learn new teaching techniques, but chose to try out features of the Online Day with students on a voluntary basis. She was very careful in the way she expressed herself, and in creating new expectations for the students in terms of requiring them to learn with technology.

Lyle, the Thespian

Lyle was one of the less experienced instructors, having taught for four years including two years of teaching while a graduate student. He worked at a state university in the Deep South. While working toward his doctorate degree, he took a course in college teaching specifically aimed at adult learning. He was the only participant in this study who had taken any kind of course in how to teach.

Discovering Online Day

When Lyle attended The Southern Association for Counseling Educators, he discovered the Online Day materials in the exhibition hall. “There was a booth there. A woman was working on a computer and I started to talk with her and voila!” Lyle had chosen to adopt the Online Day resources because he felt that the videos and research articles added another dimension to his course. He taught two sections of the course which met weekly, face-to-face. One met on campus, and the other at a satellite location about 60 miles away. He taught one class off campus each semester. “It’s an overload, so I get paid extra for it. That’s a lot of incentive.”

How He Taught

Lyle taught the course by assigning a chapter a week, and the students had to take the online chapter test before coming to class. At first the students complained about taking the test on the material before they had been introduced to it in class. However, Lyle reported the students came to class better prepared and had much higher level discussions than they would have otherwise.

The two sections of the course had very different personalities. The on-campus class had 23 students, four men and the rest women. There was no Internet connection in the classroom, so Lyle could not use the course website or other online resources in class. He tended to lecture to the class, because they were not very active in discussions. The students were less focused on personal change and more focused on how to get the information they needed for the tests.

The off-campus section consisted of 10 women, about half of whom were teachers returning to go into school counseling. It was a more mature group. Additionally, the off-campus classroom had Internet connectivity. As Lyle put it:

"Obviously with the technology backup, I get more examples, and it’s easier for us to have a conversation. It’s a smaller class, so that’s not really a fair comparison. It’s all female, so it seems like it’s a more intimate environment, where we’re talking about their personal change plans and looking at the theories. "

At the end of course, Lyle summarized some of the students’ comments from an informal course evaluation:

"They loved taking the test online, and they liked being prepared before they came to class. That was a comment that kept coming up. They’d never had a situation where they were tested on the reading before the lecture. I justified it to them saying, “You know, education is not about me teaching you anything, it’s about you teaching yourself.” They didn’t like that at first, they were very freaked about it. But after about the second or third week, they really started to understand the discussions more in class because they were so prepared for class. "

The technology Lyle used with the two classes was a combination of outside videos he brought into the class and several features of the Online Day website. In addition to using the Online Day testing and grade book features, Lyle posted his syllabus on the Day website, as well as several articles of his own.

Caveats for Future Adopters

Lyle had a few caveats for faculty considering whether or not to adopt the Online Day, rather than just buying the textbook:

"Make sure that their university can offer the high-speed Internet connection to use the videos, and probably use it to a fuller extent than I did. It does take some time to learn the software, that’s with any new technology, it takes time to learn. But I would be very positive about it. "

Lyle’s use of the Online Day resources was limited. He was not able to spend much time becoming familiar with the website, but did plan on using it again when he taught the course in the future. Lyle was interested in finding out how other instructors had taught with it. The impression Lyle gave was that if he were exposed to successful pedagogical strategies or models for using Online Day, he would be able to integrate more of it in his teaching.

Nancy, Almost Tenured

Nancy had taught for six years, but was in her first year of teaching at a Research Level One university. Because she was going up for tenure the following year, she was very focused on getting a major research grant, making presentations at professional conferences, and serving on editorial boards of professional journals. Nancy admitted that those activities left her very little time to focus on teaching.

Mentors

Nancy had several professors from graduate school who were her mentors. Her favorites shared the trait of being very engaging, to the point of being entertaining. They had the ability to use a sense of humor as they presented information. One mentor stood out in her mind. “One of my other mentors was very strong into the group process and the community of learners and community of scholars and so that idea comes through in my teaching as well.”

Nancy felt an important personal quality she possessed was her ability to use humor with the students. Nancy believed in group process, and adhered to the concept of a community of learners, in which she encouraged the students to interact with each other and learn from one another, as well as from the instructor.

Philosophy of Teaching

Nancy described her philosophy of teaching:

"I think that students do best when they’re active learners, so in a course like theories, there’s a lot of didactic expression for sure. I also wanted them to apply the knowledge as much as possible. It’s important that they reflect on what they’ve learned and interact with the materials, so I do assign reflection papers. It’s a very open classroom. People ask clarification questions, or give examples from their own experiences. I really think the community of scholars piece of education is hugely important, especially in graduate school education. And as counselors, I want them to really be comfortable with consulting with each other. So having that built in through things like the case studies where, “This is my idea. What is your idea?” is really important."

It was clear that Nancy had been influenced by her mentors in the way she thought about teaching, especially concerning the importance of building a community of learners, a concept originating from the writings of Lave and Wenger (1991). They believed that all learning is embedded in the social and physical context of the learner, and the activity in which knowledge is acquired cannot be separated from learning and understanding.

Technophobia and Technology Training

Before pursuing her Ph.D. in psychology, Nancy had graduated with a law degree and worked in a law practice for a few years. She came into using computers late, and describes herself as “technologically very phobic.” Nancy explained,

"I was just that generation that got sandwiched in. I think there were one or two computers in my high school. In college, even law school, they were just beginning to do online research, which was fabulous and wonderful, but I got through law school with a word processor. I didn’t even have a computer."

Only two years before, when Nancy attended *Computer Boot Camp* during spring break, she learned to use PowerPoint. Recently, her department received training on using Blackboard, “I became less frightened of Blackboard,” Nancy claimed. In addition, she attended a workshop on how to teach a hybrid course.

"I am very intrigued with the last thing we did about the hybrid courses. It was probably the most thought-provoking experience that I had in terms of how do you make a discussion work? How do you grade what the students post? And that’s gotten me thinking. So I do see certainly next fall when I teach this course off campus, I do see driving there about half as often and doing more with Blackboard."

She was beginning to see how she could use the discussion board to promote interaction among the students, which made the idea of teaching a hybrid course more appealing than before. The thought of being able to save driving time every other week also made hybrid teaching very attractive to her.

Technology in the Classroom

Nancy was surprised to find that her off-campus classroom did not have the technology that she was accustomed to teaching with. There was no VCR, no computer with a projector, and no Internet connection in the classroom.

"I actually had reviewed the book and did really enjoy reading it and then I realized I was teaching off campus, and I'm in a room that has no media, so there's no VCR, there's no Power Points. It's in a rural environment and our students don't all have access. Some of them have dial-up modems which [are] going to be incompatible with some of the things that I was going to do. I was thinking along the lines of letting them see clips of people using the different techniques and a few of them have been able to do that. "

After talking to the publisher's technical staff about what the students needed to be able to take advantage of all the online resources, Nancy checked with her students to determine their challenges. She found that some of the students lacked access to high-speed Internet about a month into the course. The Online Day videos in particular wouldn't work on computers without high-speed Internet. "When I was trying to figure out the whole system and found out that dial-up wasn't going to work, I went and asked them who has what, did all of them have high speed Internet, and they didn't." At that point, Nancy felt like it wasn't worth her time to use any of the Online Day resources. The problem of the technology "haves" and "have nots" created an uneven playing field. Instead, she used Blackboard to post some PowerPoint slides from a previous semester along with a few class announcements, and made use of the Online Day website optional.

Another challenge for Nancy was that some of the students didn't know how to use Blackboard. Fortunately, however, some of the more experienced students advised the others in class on how to log in and use the system, just by talking them through the steps.

How She Taught

Nancy had established the classroom environment to be conducive to communication among the students, as well as between her and the students. She encouraged collaboration by giving in-class small group assignments.

"There's a lot of peer to peer communication because I have them do a case study. We use the same case study and apply the different theories as we're talking about them. They collaborate with each other on that. I had them do a few other activities, especially in the beginning, talking about things that fueled them, things that drained them, professional development, those kinds of things. So at least once each class period have them break into small groups to discuss a topic."

Nancy used technology in her teaching very little. She did use Blackboard for course management, and also incorporated some PowerPoint slides into her lectures. Nancy assigned one collaborative activity and regular small discussion groups, but she was more comfortable with the more traditional methods of lecturing and class discussion.

Ken, Retired Therapist

Ken lived in the southeast, where he had a private practice in psychotherapy for 30 years. Before he retired, a friend who taught at a small progressive college in the northeast invited him to join the teaching staff there. He had rejected the idea before because it didn’t pay well enough. “But then as I thought about retirement, I thought, you know, I could really enjoy doing that because I don’t want to absolutely do nothing. I want to sort of keep my hand in the pie.”

At the time of this study, Ken was in his seventh year of his new teaching career. All of his courses were online, and he enjoyed the freedom and flexibility of schedule it afforded him. But moving from the south to the north and the change to the slower pace of teaching had been quite a big adjustment for him.

"I’d spent my entire life working, working hard, so to actually have free time, at first it was very unsettling. But it’s like any sort of thing that you do; you grow into it if you don’t panic. So I’m growing into it. Quite frankly, I love getting up in the morning not having a set schedule. Going to bed and not having a spare minute in the day. It’s funny how your day just fills up kind of doing things."

Teaching Environment

The structure of Ken’s college was quite different from the others. The program had only 60 students enrolled, and most were mid-career adults who lived in the region. The basic philosophy of the college was progressive education, in which the students played an active role in designing their own learning through creating individual learning contracts with their instructors for each course. The instructor played a mentor role, frequently communicating in a one-to-one relationship with the student. It was not unusual to have a class with only one student. Distance education courses allowed the students to continue working at their current jobs in their communities and living with their families while obtaining advanced degrees.

"We have a low residency program. The students and I all meet at the college at the beginning of each semester. It’s very intense what we do in that week and a half. For all of the courses I’m going to be teaching, I sit down and negotiate the contracts for that course, and we determine what we’re going to do to improve their competency in that particular area. Then for the rest of the semester, we communicate via phone and email. The college is progressive education. They are really against syllabi and things like that. So the fact that I adopted the Day course has really gone against the grain of the college."

In his first semester of teaching with the Online Day materials, soon after he sent out an email to all the potential students announcing it, 13 students enrolled, which was quite a large class by the college’s standards. The students were eager to try the online course in which the goals had been determined, the textbook selected, and a structure had been designed for them. Ken felt it was a relief for them not to have to do so much work planning the course.

Using Online Day

Ken admitted that one of the challenges he faced in putting together the course was the amount of time it took. He had to work “a little harder” with the Online Day course than courses he had put up on the college’s online course management system, First Class. “From the instructors’ perspective, the menu was hard to follow.” Ken said that he had to keep playing with the software to discover the depth of what it offered. “I found some minor problems setting up the course with the menu items figuring out exactly how I could get what I needed…. In fact, I had to consult with tech support quite often.” The menu items didn’t help direct the user to all of the program’s components. However, he felt it was worth the time he had invested in learning it. “I have to say that I enjoy it so much more because of the increased interaction between the students and myself.”

Ken understood how distance education worked from his own experience. He received a master’s degree and a doctorate in clinical psychology from the Fielding Institute, an early accredited distance learning university headquartered in California. The Fielding model uses the mentoring system along with a low residency program, which sounded similar to Ken’s teaching environment. The low residency program required that the students travel some distance to meet with professors and fellow students at least once a semester.

How He Taught

Ken taught the course completely online, apart from the orientation time he spent with the students in their residency at the college at the beginning of the term. He used a wide range of the components included in Online Day. He assigned online chapter quizzes, use of the discussion board, watching the course videos, and submitting online essays directly to the instructor. He was very pleased with how the students interacted in the discussion board, learning different perspectives from one another and commenting on each other's postings.

Attitude toward Technology

Ken was eager to use technology in his teaching, and he clearly had the time to learn it. He was the first instructor on campus to make use of the college's course management system, First Class. Ken was using it for three of the classes he was teaching at the time. He described the system as "a web-based interface with discussion boards and spaces for students to upload their work." He activated the discussion board, and included an area where students could upload their work for other students to read. He especially wanted the students to see how people process information differently.

Colleagues' and Students' Reactions

Ken had to contend with the negative reactions of his colleagues to adopting Online Day. They were concerned that teaching a course like the Online Day could change the way all courses might be taught in the future. However, the students' reaction to the offering of Online Day was overwhelmingly positive. Thirteen students enrolled in Ken's course when he advertised it in advance. This was unheard of in a college with a student body of sixty, and classes frequently had only one or two students. It was the structure provided by the Online Day course that attracted them. Ken described the usual process he went though with students to set up their courses:

"For all of the courses I'm going to be teaching, I sit down and negotiate the contracts for that course, and we determine what we're going to do to improve their competency in that particular area. Then for the rest of the semester, we communicate via phone and email. The college is progressive education. They are really against syllabi and things like that. So the fact that I adopted the Day course has really gone against the grain of the college! They love to have the students to be far more empowered, something that I agree with. But quite frankly, the students taking the Day course absolutely love it! They like to have what they call a break, you know, from the traditional Goddard method, which means we not only negotiate the contract, but we require a lot out of them in terms of what’s their passion and in a particular field of psychology, and to pursue their passion. So they like to have a break from that."

Ken felt the Online Day resources helped streamline the process of set-up and teaching. The students were relieved that they didn’t have to develop the whole curriculum for the course themselves. While Ken followed the textbook chapter by chapter, he was able to personalize instruction through use of the discussion board and use of email.

Vision for Technology in Teaching

Ken’s vision for the use of technology in teaching demonstrated his commitment to its use. Because he felt it would become increasingly important, he spent considerable time learning to make his pedagogy fit the medium.

"My sense is the majority of teaching at the university level is beginning to move toward technology-based teaching. Especially when you’re looking at the admissions and they get 20,000 applications for a thousand admissions, there’s a real hunger for education, and it’s clear the traditional university is not able to meet that demand. I think that many alternative ways of teaching is primarily technology. I think that when students see that they can keep their jobs and get an advanced degree as well, there’ll be more of them coming back. And when they find out they don’t have to go into a traditional academic environment per se, I think technology is going to explode."

Ken was very positive about using technology. He was at the beginning of a new career in which he found himself very stimulated. Ken took full advantage of working with the technology experts on campus, and led the way in trying the new campus-wide technology. Ken did not seem to feel constrained by the norms of the program. He was willing and able to take the time to learn new software, and enjoyed setting up new structures in which to work that he felt afforded the students more options for learning.

Carrie, the Nurturer

Carrie had taught counseling at the graduate level for 10 years at a university in a Middle Atlantic state. She had been teaching with technology for the past nine years. Historically the college had always been a teaching institution, and her attitude toward the students reflected that orientation, showing sincere concern for her students.

Discovering Online Day

Carrie discovered the Online Day course material through happenstance while walking through the book exhibits with two of her students at a professional conference.

"Well, I had two students with me and they're like, "Dr. Farrow, this is great!" But really, to have all the resources in one place to go with that textbook and to be able to have the students have access to that--I want the students to have everything they can have access to when it comes to their learning."

The encouragement of the two students caused her to consider taking a closer look at the Online Day resources. Although Carrie was not looking for online course material at the time, she felt the online version provided many more resources than the printed textbook, which she had used before. Carrie particularly liked certain aspects:

"Having everything built into the online course, and having students being able to have access to the PowerPoints, to the case studies. They also enjoyed the in-text definitions that you can just click on the link and hear it and read it, they really enjoyed that."

Philosophy of Teaching

Carrie's philosophy of teaching was about empowering the students, which stood in contrast to her own graduate school instructors' stances. She recalled their teaching as strongly teacher-centered, which manifested itself in a strictly lecture-style learning environment. Carrie was very clear that she did not want to emulate her models. The biggest difference between Carrie and her instructors was their attitudes toward the students. "I've tried real hard to be conscious of how I interact with my students and treat my students so that I won't treat them like I was treated." Carrie characterized her treatment by her instructors as condescending; they discounted students' responses in class and acted as gatekeepers.

"I don't teach at students, I try very hard to dialogue and to encourage thinking because they've not been taught to think. My assumption is that when the students come to class, especially when they begin the graduate program, that there's going to be an overall learning curve, period. And so I do whatever I can, without doing their work for them, to help them to understand. We have a lot of students who are older, and some of them may have been out of school 10 years, 5 years. It's my role to empower them, to let them know that regardless of when they graduated from college, that they can do the work."

How She Taught

Carrie taught the theories course off-campus as a hybrid. Carrie met face-to-face with the class three weekends of the semester, where she lectured, showed videos, and directed the students in experiential learning exercises. She taught all day Saturday, and half a day on Sunday for a total of 13 hours.

"They do their exams online and I go up on the three weekends to lecture. They do the videos and responses to the videos online, and then we spend the time together just lecturing and asking questions, and discussing the text, and whatever."

As the students read each chapter, they took the corresponding online quiz on the Online Day website. The quizzes gave both the students and the instructor immediate feedback on their understanding of the material.

Despite having used discussion boards in previous courses she taught in WebCT, Carrie did not use the discussion board component of the Online Day; she had found it too time-consuming. Carrie described how she implemented an online discussion, posting a topic question, and leaving the discussion open for a week or two, “for the students to respond to the question, and to respond to other students’ responses.”

When pressed to explain why she hadn’t made use of the discussion board, at first she explained that there was ample time for discussion when they met face-to-face. However, in time, she began to open up and share her experience with discussion boards.

"I’m going to be very honest with you here. I guess sometimes it gets to be so much, a discussion board just sometimes gets to be so much! And to have to respond to every student two or three times, it’s something that I stopped doing a while back. At the end of the semester when I would use the discussion board, I would pull the whole thing and read through it and look at the quality of the comments that the students made."

Carrie’s lack of an efficient way to manage and assess online discussions caused her to abandon their use.

Technology Training

Of all the participants in this study, Carrie had received the most consistent training in technology over her 10-year teaching career. Because her graduate school was in a sparsely-populated region, outreach through online teaching was an important focus of the institution, as was off-campus teaching. The instructors were introduced to the

WebCT program in formal classes at the beginning, followed by frequent, less formal updates.

"We have an in-house trainer at the graduate college. She’s certified in WebCT and Vista, and a couple of people on faculty are as well. Whenever a new version comes out, we’re trained on that new version. We have on our WebCT site various downloads that we might need or software that we might need for our classes, like Flash, Shockwave, and other things."

In addition to the formal training sessions, Carrie described other ways that teaching online was supported. The first was a monetary reward. “When we develop a course online, we have a review committee that reviews the course. Once it passes that, then we’re paid a $3,000 stipend.” The second type of support was a users’ group made up of colleagues in her department:

"We have what’s called a users’ group [sic] comprised of people who have online courses. The users’ group meets once a month, and it’s been doing that now probably for the last eight, nine years. While we’re working in that environment setting up our classes, if we need something, we just call Fran, 643-1091. I know it by heart! She’s always at our disposal. She made materials available both in print and online."

Attitude toward Technology

Despite Carrie’s years of experience teaching online, recently she decided to forego teaching online in favor of hybrid or face-to-face courses. She cited the turning point as the moment WebCT changed its name to Vista, and the whole look and feel of the software changed significantly. She became frustrated with keeping up with the frequent changes which disrupted the automaticity she had acquired with using the earlier program.

Miller, The Late Adopter

Miller had taught at the graduate level and served a few years in an administrative role during her 12-year tenure at a state university in the northeast. Although she had used the Day textbook before, at that time the online version of the course did not exist. Miller claimed that before adopting the Online Day, she probably did less with technology in teaching than most of her colleagues. Instead, she provided photocopied course packs for the students rather than posting articles online.

"It’s not that I really had disdain for it, but by the time I got to the point where I really wanted to use technology, I was involved in too many administrative duties. I am a person who does a lot of hands-on activities, so it’s not real natural for me to integrate technology in a big way with my classes."

She taught the theories course with the Online Day materials using a hybrid format. After the first few face-to-face meetings, the class met only every other week in person.

Philosophy of Teaching

Miller was very clear about her philosophy of teaching:

"I’m constructivist. I promote students to build their own understanding, so I’m not at all a lecture-based or behaviorist professor. My approach is to provide students with information and resources and then guide them in an exploration of those materials so that they come to an understanding of the material."

In constructivist teaching, in which knowledge is built within the group, a high level of trust among participants is required. It’s the job of the instructor to help create a feeling of safety where the students are able to express their developing understanding of new concepts being introduced. Miller explained how she tried to help the students get to know each other in the first couple of class meetings by using “joining activities.” She gave an example of one such activity in which she distributed descriptions of personal qualities on index cards. “We pass them around. They see all of them, but they’re only allowed to keep five.” Two had to be qualities they’d like to change about themselves, and three were positive characteristics, which they shared with the class. “Because it’s a constructivist classroom, they have to participate on that level. It’s not a kind of sit-back-and-listen-to-me class.”

Technology Training

Miller had taught herself to use computers, but she also attended some professional development training offered by the university. The training Miller received on using educational software consisted of occasional short courses. “I’ve sat through a few of those two-hour-long courses and gotten excited about it, and then really had trouble in the application phase.” The courses were not tailored to the instructors’ teaching or subject area. Instructors did not get to work with their own materials in learning how to set up a class website in Blackboard. Miller saw that as a major flaw in the training. Miller made use of the telephone tutoring provided by the publisher to become oriented to the use of the software for setting up her class website. There she posted the course syllabus, assignments, announcements, and topics for the discussion board.

How She Taught

Miller assigned students to watch the online videos outside of class; encouraged students to use the test bank as practice; and assigned students to post to the discussion board, as well as comment on other students' postings. Additionally, she used videos from her department's collection to show in class. Miller gave her students access to online help from the telephone tutor, posting the tutor's contact information on the course website.

Using the hybrid format, Miller was able to discuss any technical difficulties the students might be having at the following week's class. The face-to-face help she gave them seemed to help the students master the online resources without too much stress. Interestingly, in teaching her first class using technology, Miller had to become a technology advisor to the students. Teaching a hybrid course had added a new role to her teaching repertoire which involved more time, effort and skills.

Miller found that one of her biggest challenges in teaching the theories course had always been the amount of class time the videos consumed. Miller thought that having the students watch the streaming videos from the course website on their own would be a major improvement, "a wonderful way for them to take their time and really be able to read the theory, see it being performed, spend some time digesting it and thinking about it."

Online Communication

Because this was her first hybrid course, Miller had to decide how she would communicate online with the students. She reflected on what kind of things she felt comfortable responding to directly on the discussion board, and which things she felt deserved a personal email or printed response.

"I communicate with them through regular email, also in person every other week. I don't communicate with them on the discussion board. I provide feedback on their reflections, but I do it in writing. I don't want it to be public. I often challenge their thinking and their opinions."

Miller was not comfortable interjecting her voice into the students' discussion board. Especially when it came to challenging a student's ideas or beliefs, Miller felt she should respond to students privately, on an individual level. If she had chosen to comment to the discussion board, it might have been instructive to the class as a whole. Instead, she responded to them with individual comments written on paper given directly to students. She seemed concerned that she might embarrass or offend a student in front of his/her peers in disagreeing or correcting an inaccuracy he or she had posted.

Miller had prepared a very structured rubric for posting to the discussion board. As a result, the way the students used it was rather formal. Miller was very pleased, however, with the amount of interaction between the students both in the classroom and on the discussion board.

"This semester it's been really, really good. In fact, I love that about the postings because I require them to not only do their own posting, but respond to someone else's. When they're in class there's not a lot of interaction across the entire class, [but] there's great interaction that way on postings. They can't respond to the same person each week, so they have to respond to other people. In class when we do the base groups where they discuss their reflections, it's good collaboration. You wouldn't push a whole group [into] pretty close intensive kinds of discussions when you don't have the technology, but they're able to really address arguments of students across the class over the course of the semester. They bring that confidence into the classroom, presenting as more knowledgeable about the theories."

Miller attributed the students' high level of communication to their experience of proving themselves in their postings and contributions to the discussion board, where, "They have to take a stand and defend it. So by the time they come to class they are a little bit more confident in what they discuss." In Miller's estimation, the hybrid course format enabled the students to know each other better and share more than the more traditional class format she had used before. She saw a direct connection between level of trust among the students and their level of participation in discussions, both online and face-to-face.

Neal, the Experiential

Neal had taught 12 years in a private residential college in one of the Plains states at the undergraduate level. In addition to full-time teaching, he had a counseling practice both at the student counseling center on campus and at his church.

How He Taught

He taught the theories course weekly in a face-to-face format. Neal enjoyed interacting with his students and shaping his lecture to their questions. He was so confident about his expertise that he could approach the class without notes and keep in mind a clear idea of the topics to cover that day. The flexibility and communication skills he developed as a crisis counselor allowed him to extemporize. Neal became very excited talking about the process, which seemed like play to him. The process he described sounded very similar to what the education theorist Csikszentmihalyi (1998) referred to as “flow”:

"When I walk into a classroom, I usually don’t use PowerPoint. I like to start on the left hand side of the board and I work my way across as I develop my lecture, as I interact with the students. I build my lecture based upon my study and their comments, blending them to meet their needs and my needs and the discipline’s needs. And I share myself with my students, my stories, my life, my insights, I invite them to share theirs as well with me."

Neal’s beliefs combined the holistic, the analytical, and the existential points of view. His teaching methods fit both with the stage of development of his undergraduate students and with his personal philosophy of teaching:

"I believe that teaching is exponential in that it involves me and all that I am, my students and all they are, and between us is the subject matter and we must understand it, dissect it, and apply it to our lives. What does the information do for me, with me, and around me? How does it affect my life? It’s not just a body of knowledge to be learned and repeated on a test. How will it change my life? Using Bloom’s taxonomy we look at critical thinking and ask, what can I do with it in my life, as I interact with others, and as I mature as a person? My teaching is always in-depth, personal, and I always believe in the need of the moment--it is the culmination of personality and truth, because it comes through both."

Neal explained that he liked using experiential activities with his classes. He wanted the students to be fully engaged and actively participating. From Neal’s counseling experiences, he knew the kinds of topics that the students couldn’t resist.

"I like to do things simply to get people’s attention to help them think of learning in different ways. I know that one technique I use is very helpful. We talk about family systems, and I’ll have a group of students in front of my class, and there’ll be six or seven of them in a circle. I’ll invite someone else to come up, and the only instruction I’ll give them is don’t let them in. And immediately, without any conversation, they know what to do about boundaries. We talk about boundaries, and how to open up boundaries, how to close boundaries. What are healthy boundaries and what are unhealthy boundaries? What does this family system look like, the parental system and the sub-systems? And think of their family and how that works."

Neal believed it was important for students to be able to observe experienced counselors demonstrating the different theoretical models being studied. He felt the videos were an important component of learning about counseling. “There are three ways I know of to experience a counseling session. You become a client, you become a counselor, or you have a videotape of it.”

Attitude toward Technology

While Neal thought the online Day resources added significantly to the learning experiences of his students, he felt strongly that teaching totally online was not adequate to teach the subject.

"I use [technology] as a tool. I don’t want to be an online instructor. In the helping professions we must learn face-to-face. I give the students certain assignments because I want to replicate how to find a core, talking in committees, talking to your supervisor, talking with colleagues resolving conflict, finding solutions, working out a plan, being a part of interdisciplinary team meetings. I want to replicate as many of those skills as possible, and you cannot do that online."

Neal didn’t seem to consider that online communication in the workplace has become more prevalent than typed memos or telephone calls. Although face-to-face communications skills are vital, good online communication skills cannot be overlooked.

Neal spoke of his dean as a “techno-geek,” who pushed the instructors to use more technology:

"I prefer to use either a white board or a chalk board as I develop my lecture materials. I’m very hesitant to bring [technology] into the classroom. Teaching is about relationship, and you build relationship by interaction. I think PowerPoint and videos can detract from teaching and make students more passive. I would rather have book, teacher, and the students. These things are tried, they are true, they are dependable, and they last. "

At another point of the conversation, Neal reflected on the focus of his work and training as a therapist and teacher:

"All of my professional training has been how to work with people, not technology. But I would welcome more stuff on technology as long as it were designed as a supplement to my teaching, as opposed to the primary way of teaching. "

Although Neal could be dogmatic, he allowed himself to consider different options and adopt changes, such as incorporating technology in his teaching, as long as it served to enrich the learning experience and didn’t encroach on the way he liked to teach. His defensiveness made it seem as if teaching with technology was being forced upon him. He had been willing to devote a major portion of his Christmas break to learn to use the Online Day interface, to post his materials on it, and to create the chapter quizzes from the online test bank. However, Neal would not be won over to teaching completely online.

How Teaching Was Different

Neal was grateful for the test bank questions and the automated grading function of the software. He thought the ease with which students could check their grades from the quizzes online helped give them confidence in knowing where they stood in the class. The ability to select questions from the test bank and create the quizzes online made his workload considerably lighter. He stated that the biggest difference in his teaching using Online Day from previous semesters was attributable to using the testing and grading functions.

"The major difference for me is that the exams and quizzes are graded automatically by the online management tool, and students get immediate feedback on their performance. One of my weaknesses as a teacher is I procrastinate with my grading. I have spurts of grading during the semester. I try to keep caught up, but with my schedule and my distraction level when it comes to grading, I can be one, two, sometimes three weeks getting work back to them, which I regret sometimes. So with this online tool, they get immediate feedback. "

Because the students took the weekly quizzes outside of class, “My class time was all lecture, information, and interaction.” Neal reported that the students reacted favorably to the online quizzes because they could take them any time that fit into their schedules during the week.

Cohesive Class

In reflecting on the course at the end of the semester, Neal described the class as different in its nature from other groups he had taught before:

"This group was more cohesive than most of my classes. I don’t know if it’s a function of I’m a better teacher now, or of the group itself, or how the class was organized meeting three days a week instead of two, or whether the online materials added to that. I don’t know which had the most influence. I just know that it flowed well, and I got good verbal feedback on my informal evaluations by the students."

Ed, the Technically Supported Adopter

Ed had a long career of about 30 years as a counselor, which were interspersed with years of teaching. Although he had been teaching for 18 years, Ed had never taught the theories course until the summer of 2006, nor had he taught with technology before. The college where Ed taught was in a small town within a large, sparsely populated region, in which there were three other major competitors. Faculty members in

his program were being pushed into online instruction, because, as Ed put it, “Small colleges are in a very competitive mode right now because everybody is fighting for students.”

Attitude toward Technology

When the program director had asked Ed the previous semester if he would teach the theories course online, he responded, “Well, I don’t want to, but yes I will IF I can find a good [prepackaged] one.” Ed explained that he had been strongly cautioned against online teaching from colleagues who had tried it.

"When online courses first started being put out there, I would say the professors didn’t know what they were doing. They worked their butts off and they found themselves answering student questions 24-7. I mean every person without exemption, told me, ‘Do not do an online course, it’s much more work. You’ll spend all your time on the Internet, on the Web; you’ll never get any rest.’"

Discovering Online Day

Ed had been made aware of some of the difficulties of teaching online, enough to be wary of taking the challenge lightly. But rather than ruling out the possibility, he pursued materials to help him develop an online course that might help prevent some of the problems his colleagues had encountered. After checking on the availability of new resources with a number of other publishers by phone and email, Ed came in contact with the staff at Lahaska Press. When he heard the Online Day course materials described, he said, “Well, let’s give it a shot.”

Technology Assistance

Ed had taught the course completely online twice before. Students sang his praises to the program director, who in turn invited Ed to make a presentation about his online teaching to his colleagues to encourage them to teach online. So by the time of this study, Ed was teaching the course for the third time. Having never used technology prior to using the Online Day resources, Ed had ready access to the on-campus expert, Tim, who was hired to help instructors learn to teach online. Tim did the communication with the publisher’s online support team, and basically put Ed’s course materials into the course template for him. Ed acknowledged the vital role Tim played in being able to teach online:

"We were also fortunate, Tim Parsons, who talked to the publisher’s technical support really more than I did, really is a prince of a guy. He understands computers upside-down and backwards. So Tim was always there to help troubleshoot."

How He Taught

Ed made use of a number of resources on the Day website in his teaching, including the discussion board, the profiles of the theorists, and the ready-made exams. He felt those components “took the sweat out of teaching.” Ed was thrilled with the student participation in the discussion boards.

"Our discussion boards are just awesome. They’re off the wall, they’re down the middle, they’re controversial. The students agree and don’t agree with each other. It’s more like a free-wheeling discussion in the classroom in which anything is acceptable. Anything goes. So this opens them up and keeps [the online course] from being sterile."

When asked about his philosophy of teaching, Ed became very animated and passionate. He described how he worked with the students:

"Face-to-face, hands on! It is not taking knowledge and pouring that knowledge down their throats and forcing them to regurgitate it in a way that’s pleasing to me, coming forth with all the knowledge that I possess or is in the textbook and throwing it out there and have the students respond to it. Based on their response, we begin an interaction. I develop them from where they are, and from what their theoretical interests are."

Ed’s use of the phrase “face-to-face” is an interesting description of his teaching methods in the midst of a discussion about teaching online with students he had never met in person.

Ed’s teaching style comes across as a combination of constructivism and evangelism. However, in the online environment, he can’t rely on his oratory powers, so his tendency is to be supportive and involved. He participated in the online discussions with his students, sometimes correcting mistakes, sometimes congratulating on a good comment, and at other times, redirecting the discussion.

"The thing that really makes it a hot course is a lot of interaction. When they get on discussion board, I read everything they say. And then I don’t just say, “Way to go!” I interact. And I may agree, I may challenge, so they get to know each other personally, and they get to know me personally. That’s the most exciting thing, that’s there’s dialogue the entire semester, it just starts with the discussion board."

According to research on indicators of higher-level thinking in online discussion boards, when students disagree with one another and argue various points, they are engaged in higher level thinking as described in Bloom’s taxonomy (Bloom, 1986). When students simply agree with each other, there is often little learning taking place.

Challenges of Teaching Online

When I initially asked Ed what kind of challenges he encountered teaching online in the spring semester, he couldn’t think of any. However, when he thought back to the first time he taught the course, he recollected difficulties the students had in learning to work the online quizzes.

"We had a lot of problems with students, I don’t care what my instructions were, “Gee, I didn’t know this quiz was closed and that if I got out I couldn’t get back in; I didn’t know the quiz was going to close on this day; gee the time changed and I didn’t know it affected me.” We worked out all those problems. Tim was the in-house guy that could take care of this and take it off of me."

Although Ed had used Online Day for the two previous semesters, it was the first time he had taught course with the Online Day resources embedded in Blackboard. Ed felt this extra navigational layer of entering through another program might have made access more difficult for the students. Ed felt like the biggest problem that semester stemmed from “the kids not knowing how to get into Online Day. We get into it kind of through the back door, in the sense that we do have it now on Blackboard.” The students basically had to know how to use both systems in order to complete their assignments.

When asked what he thought might be done differently to help the students overcome this obstacle, a frustrated Ed responded:

"They just have to familiarize themselves with computers, concepts like Blackboard, online registration. I've had some students say, “Look, I'm not computer literate.” Well, to get through this university you need to be computer literate. So they struggle and most of them make it okay."

This was a surprising comment coming from Ed, who was totally dependent on Tim to make it possible to teach an online course. He was bewildered about what went wrong this semester:

"It seems like I had to kind of keep going back and nurse some of them along. The students did not drop out, they simply failed the exam. Coming into the exam, they had quiz averages of 34. I know it's not the course, because 80% made A or B. There were one or two Cs and two Fs, so maybe they just didn't finish. "

His comments show how easy it is to lose touch with online students. If the majority are active in the online discussions and doing well on the automatically-graded weekly tests,

a student could fall behind and not be noticed. Ed didn't grade the students for each week's participation in the discussion board, so one or two students' absence could go unnoticed.

Orientation for Online Students

In thinking about a possible solution to the problem, Ed told me that the university used to require all students to register on campus. When they arrived, the students went through an orientation program where they met the teachers and could be taught face-to-face what they needed to know to take the course. Ed really liked the program and felt it was essential. However, the vice-president decided to do away with orientation because he felt it was a hardship for the students to come to campus, and might negatively effect enrollment of distance learners. This policy was a sore point with Ed, who had made his opinions known about the importance of face-to-face orientations in the past. Although very frustrated with the situation, Ed would not bring up the problem again, because he knew he would just be “shot down.”

Mark, Katrina Survivor

Mark had taught and served as provost at a university in New Orleans for a total of 31 years. Of all the participants in this study, Mark was the most experienced teacher. He had also done the most experimentation with technology in teaching. Hurricane

Katrina had destroyed his home two years before and forced him to move out of the city. The effects of the storm created both emotional and material losses for everyone there. The devastation to the city's infrastructure had a negative impact on the quality of the university's computing labs, on the students' ability to afford personal computers, and on the Internet connectivity they previously had.

The Post-Katrina Environment

Mark was realistic about what was possible to accomplish in the post-Katrina environment, choosing the traditional face-to-face lecture-based format for the theories course. He understood his students' ambivalence about coming to the campus after the hurricane: "We're like an oasis to most of the town, because it is a drive in through pretty much of a dead zone to get here. So they don't really like coming in."

The students claimed to want online courses, but they also wanted personal contact with their instructors. Immediately after Katrina, almost all the courses offered were online, because few of the students could get to the campus. The quality of those courses varied widely, depending on the individual instructor's level of experience and understanding of the technology and pedagogical methods that worked in the online environment. Many students became completely turned off to online courses during that time. Mark felt it was not unusual that they should have a negative response to online courses after that, even when things had returned to some semblance of normality.

Philosophy of Teaching

Mark was outspoken regarding how he felt students should be taught. His words could have sounded a bit bombastic, but his empathy for the students and the difficult conditions in which they were living clearly informed his opinions. He found fault with constructivist teaching that led students to believe that there were no right or wrong answers, and made it a point to correct students who exhibited that belief.

"I try to like give them everything I know. I'm very demanding and I also expect them to know the right answer. I always ask questions that have a right and a wrong answer so they don't get the sense that there's really no right answers. Otherwise they'll flunk the licensing exam. The counseling kids have this notion that there's never a right answer, so it's okay, just whatever you think is a good answer is a good answer, probably from taking qualitative courses. The exams I give are very content-based; I guess I'm very traditional in that sense. The classes are lecture and discussion, and I try to get them to develop their theoretical posture a bit, get a sense of which theories they like and why. I’m there to teach them theories and make sure they’re going to max the theory part in the licensing exam because they’re going to know it better than anybody else."

Covering the Material

Mark identified his biggest challenge in teaching the theories course as, “trying to get all the stuff in that needs to be covered” for the licensing exam. He had thought the additional resources included in the package would enhance the students’ learning, especially the videos, but he found instead that technical issues detracted from the students’ ability to focus on the content.

Discovering Online Day

Mark first became aware of the Online Day course materials at a professional conference where he saw it being demonstrated in the exhibits. Although he was not teaching the theories course the following semester, he thought it might be useful to a colleague:

"When I saw the sign, I thought this would be useful to her, because she was actually teaching it online. I wasn’t really planning on doing an online course, but I though maybe I could use some of this stuff in the regular class just for convenience."

Mark had taught the theories course many times before, using different textbooks, which he found to be basically the same. “It wasn’t so much the content of the book, it was the webpage that I thought would be useful to students, because my biggest problem is trying to get good examples of the demonstration of the theory, the purest theoretical demonstrations, and they’re very hard to come by.” The videos he had shown to classes before were quite old and looked dated. Mark was enthusiastic about having the new videos exemplifying the different theories that the students could watch on their own. He felt that videos could play a critical role in their understanding of the therapeutic milieu. Previously he had concerns about the videos taking up so much class time, so he thought the streaming videos would be a good solution.

Student Difficulties

However, the students had difficulties accessing the online videos.

"Not everybody buys the textbook. Some of them had problems playing the video because they didn’t have the right video player software. Most counseling students aren’t that technically adept. I told them what to do, but I could tell I was talking to glazy-eyed people. That was another problem I didn’t really anticipate."

The reason students didn’t purchase the textbook was economic. Many of the students had lost their homes in Katrina a year before, when floods washed away whole neighborhoods, and their families had not recovered financially. “Not all of them have computers. Some had them, but lost them because of Katrina and had to replace them. That’s still going on down here.” The students had no option whether or not to pay tuition, but the state did not mandate the purchase of textbooks for the course. So to save money, sometimes students tried to get by without the textbook. There were only two or three students who didn’t buy the textbook in Mark’s theory class, but this created difficulties. It meant that the students without textbooks did not have access to the Online Day website containing the videos and the additional resources, either.

Clash with Blackboard

A technical issue Mark faced was trying to maintain two course websites. The university required instructors to create a website for each course they taught in Blackboard, and he created the other in Online Day. He tried to keep parallel websites going, using Blackboard as the “email kind of contact source.” Because all the students had access to Blackboard even if they hadn’t bought the textbook, he eventually stopped maintaining the other website.

Attitude toward Technology

Three years ago, when Mark ended his stint as provost, he had embraced technology in teaching. He taught online classes to multiple remote sites via videoconferencing, he created voice-over PowerPoint presentations of lectures which he posted on the web, he video recorded some of his lectures for students who missed class, he played students’ audio recordings of practice sessions over the Internet to the remote classes and commented on them synchronously, and he used Blackboard to deliver resources to both distant learners and on-campus students. He made use of discussion boards, online exams, and the computer labs for orienting students to technology for his courses. The first year following Katrina, the campus was completely shut down due to flooding, and two-thirds of the courses were offered online. So by the time Mark taught this course, he had experimented widely with teaching technologies.

By the end of the semester, Mark had stopped maintaining the Online Day course website for the class, and instead relied completely on the Blackboard website. Student use of the Online Day resources had been made optional. Mark resorted to his old methods of classroom teaching. Why? A combination of factors challenged uniform use of Online Day by the students: inability to afford textbook, lack of computers at home, lack of high-speed Internet connections at home, discomfort with downloading software or learning a new program, and difficulty accessing school computer labs, to name a few. Mark' facility with pre-existing technology made certain elements of the program, such as the test bank questions, which were attractive to the other adopters, irrelevant for him, since he had already created his own online chapter quizzes which he administered through Blackboard.

Summary

In summary, the participants were willing to address my standard questions with thoughtful answers based upon their personal experiences. Personal information gleaned from the interviews included:

- career paths,
- personalities,
- teaching styles,
- teaching philosophies,
- mentors,
- goals for the course,
- attitudes toward the students,
- technology training,
- beliefs about how students learn, and
- how they like to be taught to use technology.

Based on the accounts of the participants, it is clear that integrating technology in teaching is a complex process. Each instructor had his or her own particular set of circumstances that determined the degree to which he or she incorporated technology. Some personal elements necessary for integrating technology included the instructors' intrinsic motivation for adopting it, a level of comfort with technology, tenacity in getting technical assistance, having the time to experiment with the software to learn what it could do, their willingness to change the way they taught in order to incorporate the new technology, and their ability to teach themselves to use a new web-based course management system. Some other key factors to technology integration were classrooms equipped with computers and high-speed Internet, students who bought the textbook (and thereby had access to the course website), student access to high-speed Internet at home, and students’ computer competency to navigate the course website and download the software to access the streaming videos.

The themes that emerged from this chapter provide the focus for the final chapter discussion. Although each instructor taught in a unique way, there were certain experiences they encountered that determined how they taught, and how they incorporated the Online Day resources into their teaching.

DISCUSSION

This study examined how nine instructors taught the same course with the same textbook and online resources. The study revealed a range of strategies the participants used in teaching, and their levels of technology integration. All of the participants had adopted the online version of the text with the expectation of offering the students its rich array of resources. However, for a variety of reasons, the majority of the instructors were not able to use those resources fully. The goal of this chapter is to examine the reasons why.

The major factors in determining how instructors used the online materials provided with the textbook fell into five basic categories which emerged from the data:

- The teaching environment,
- Pedagogy,
- Levels of technology integration,
- Barriers, and
- Career stage and age.

Each of these themes is explored in depth in separate sections of this chapter. The teaching environments varied greatly, depending on the course format. For those who taught online or hybrid courses, the website for Online Day served in large part as the teaching environment. The instructors' pedagogy was examined to determine how they taught, to what degree they integrated technology, and barriers they encountered in using technology. The final section on career stage and age brings attention to common characteristics of technology integration the instructors shared at different stages of career development. The participants' experiences will be related to existing literature on distance pedagogy and learning theory.

The Teaching Environment

Although each instructor had a unique teaching environment, several shared environmental factors that influenced how they taught: the Online Day software, the course format and classroom location, and university policies and practice. In this section each of these factors are examined to determine how they influenced the instructors' implementation of the innovative technology.

Online Day

The publisher of Online Day, Houghton-Mifflin's Lahaska Press, took one of its popular college textbooks to prototype in a unique format: an e-textbook combined with in a web-based proprietary course management system, with added media content such as videos, an in-text audio glossary, PowerPoint slide shows, and an online test bank. To create such a product, Lahaska contracted with an educational technology company, Intellipro, to turn the Day textbook into an online course.

Carrie, who was proficient in using WebCT, found the structure of the educator's interface confusing when setting up her course:

"For the instructor, it's kind of, even though it's very doable, but it's almost like having to work in two classes, because you go into your managed class and create your assignment. And then you have to go into managed course, and then you enter the class to add the assignments, I believe that's what it is. So it's almost like the instructor has to operate in two classes."

In Carrie's example, it's clear that both the terminology and the functions on the instructor's main navigation page were not clear to her. Splitting the functions into two categories added to the time it took her to learn how to navigate the course set-up.

Although the supplementary media in Online Day were listed under “Resources” on the course website, it was not easy for the instructors to find. To help the instructors to find out about the special resources in Online Day, Lahaska posted a teacher’s guide on the publisher’s website that listed the special features, such as the case videos, the primary source material, and the in-text audio glossary. However, having the guide at a different location from the teacher website required the instructors to switch back and forth between the two for information to customize their course websites.

Course Format and Class Location

The researcher made an assumption at the beginning of this study that the instructors who adopted the online version of the textbook would be teaching the course online or hybrid. Only two of the nine instructors, Ed and Ken, taught online. Two others, Carrie and Miller, taught hybrid courses, and the remaining five taught face-to-face. However, there was variety within these categories. Of the two instructors who taught online, Ed never met the students face-to-face, while Ken taught face-to-face in a residential orientation at the beginning of the term. One of the hybrid instructors met face-to-face over three weekends of 13 hours of class. Miller taught a hybrid which met every other week after the first month of face-to-face classes. The remaining six instructors taught their courses face-to-face on a conventional schedule.

Off-campus Teaching and Access to Technology

Three instructors, Carrie, Lyle and Nancy, taught off campus. They were required to teach at least one course off campus each semester in order to reach students who wouldn’t otherwise be able to attend the university due to distance. In each of the off-campus classes, over half of the students were adults, many of whom worked full-time, and the great majority was female. While Lyle and Nancy commuted to the off-campus locations each week, Carrie created a compressed hybrid course.

Lyle’s off-campus classroom had far greater access to the necessary technology to make use of online resources than his on-campus section, such as high-speed internet, computers, a computer projector and screen. He was able to supplement his lectures with examples from the course website, and from the web at large. This contrasts with his on-campus section, who did not meet in the education building, but rather in an older classroom without any Internet access or computer equipment. One time Lyle carried his own television and VCR to the class to show videos. He sometimes ordered an audiovisual cart to be delivered, but this proved to be a challenge because the service was inconsistent. This made it very difficult to use technology in that class.

Nancy was required to drive an hour and a half to her off-campus classroom. After attending a workshop on hybrid teaching, she was seriously considering teaching hybrid with her off-campus class in the future. However, she planned to use the textbook she had used in the past, not the Day textbook.

Lyle taught two sections of the course, one on-campus but in a classroom without Internet connections, the other off-campus with technology. The two classes were kept in synch through use of a shared course website using Online Day. Having the technology available in class gave Lyle more examples to draw from. The off-campus class was smaller and all female. Lyle described it as a more intimate environment, where the students talked easily about their personal change plans. These plans allowed the students to apply the theories they were learning to themselves in order to change something about themselves. The larger class was mixed gender and more passive. As the semester progressed, the students focused less on discussing their personal change plans and more on getting the information to pass the tests.

Carrie taught her class as a hybrid, with a non-traditional schedule for class meetings. She compressed the class meetings into three weekends that met 13 hours each. In addition to lecturing, Carrie showed the videos in class, where they discussed them at length. During the weeks that the class did not meet face-to-face, Carrie assigned the students to read the chapters and take the online quizzes. She also assigned the chapter reflections, which they emailed to her. Carrie’s institution was originally a free-standing graduate college, but later became the graduate component to a major university that caters to undergraduate students. Teaching was the number one priority of the school, and Carrie was very engaged with her students. The classrooms were all outfitted with technology tools for teaching, such as televisions, DVD players, laptops with projectors, and drop down screens from the ceilings. Fortunately, for the course that Carrie taught off-campus, the classroom was similarly equipped with all the features mentioned above.

The media resources provided in Online Day, particularly the videos, were very helpful to Carrie in teaching the course in a compressed schedule.

University Policies and Practice

The Online Day software did not fit with the usual practices of university course management. All of the schools in this study had purchased campus-wide course management systems. Most had policies requiring instructors to create a course website on the campus-wide course management system (i.e.-Blackboard, WebCT) for each course they taught. The small private colleges in this study were less likely to require this than the state funded institutions. Most of the schools used the syllabus contained in the course management system for the accreditation board assessment.

Conflicting Systems

The required use of the campus-wide system conflicted with the way Online Day was designed. Online Day was created as a fully integrated, seamless interface through which students and instructors could communicate, carry out, and assess assignments. When instructors were required to use campus-wide course management, they had three options: to create two websites, to place a link to the Online Day inside the required course website, or to operate under the radar, using the Online Day website as it was designed. Carrie chose the last option and taught with Online Day for one semester, then discussed it afterwards with the campus technology expert. When she did, sparks flew.

"I had a discussion with our on campus tech support person who helps with all our WebCT stuff, and I was so excited, it’s so wonderful, it goes with the book, and I said, “They can get the book for a little less,” and then she said, “I’m going to tell you something right now. I didn’t hear this conversation. I didn’t hear it. Because the students would have to pay – okay, if I were to import the Dot.learn into WebCT, however that’s done, the school’s going to charge the students more.”"

This situation was a hot button for the university technology support staff trained specifically in the campus-wide course management system. When faced with helping instructors using a different system, usually one produced by a textbook publisher, the support staff was frustrated at not being prepared to deal with the problems encountered. As demonstrated in Carrie’s quotation above, the technology expert felt her ability to perform was undermined by instructor’s adoption of the new software. In this instance, Carrie went back later and worked out a compromise which entailed putting Online Day as a link within the WebCT course, and not using all the functionality.

Ed found himself in a position similar to Carrie’s. Although Ed had used Online Day in the two previous semesters, the third semester he was required to teach his course with Blackboard. He dealt with the conflict by embedding a link to the Online Day materials within the Blackboard interface. Ed had to resort to this method to be in compliance with university policy, but it seemed to hinder the students in finding the Online Day resources. When I asked Ed about the biggest problem he encountered during the semester, he responded, “I think just kids not knowing how to get into Online Day. We get into Online Day kind of through the back door in the sense that we do have it now on Blackboard.” Embedding the link to Online Day under a layer of Blackboard navigation may have added to the difficulty of the course for some of the students. Ed indicated that he experienced more difficulty than in previous semesters helping the students learn to use the technology. The students asked repeatedly for him to reopen the online tests beyond the allotted time frame.

"It seems like I had to kind of keep going back and nurse some of them along. It’s like, come on, you know, I’m not going to open any more for you again, stop doing this. Some would get behind. I had two students that failed. I’ve not had that before. "

Another way of dealing with the requirement to use the campus-wide system was to simply create and maintain two different websites for the course. Lyle and Mark both tried this approach. Lyle had difficulty deciding what to put on which website in order for the students to be able to distinguish between the two. Mark dealt with the ambiguity by creating two identical sites, but eventually stopped maintaining the Online Day website. The clash of the two course management systems created some of the most serious problems for the instructors and students using Online Day, which will be discussed in greater detail later in the chapter.

Instructor Technology Training

Universities differed in the level of technology training provided to instructors. Most of the instructors had received training in their campus-wide course management system, but they did not always get to practice their new skills within the training session. According to Miller, she had not been given time to practice with Blackboard at the training session. She would have liked to work with her own "real" course materials, and have a head-start to setting up the rest of the course on her own. The literature on cognitive information processing corroborates Miller's instincts that both rehearsal and working with real materials have been very reinforcing to learners of technology. As information is processed into long-term memory, the learner combines the new information with prior knowledge (*Atkinson & Shiffrin, 1971*). Any sensory cues that aid this process help anchor the information, therefore using one's own course materials would fill this function very well. This fits with Ausubel's *meaningful learning theory* (1963) which listed three essential conditions: the learner must use a meaningful learning set; the material to be learned must be potentially meaningful; and what the learner already knows and how it relates to what is to be learned. The last item provides the cognitive structure for linking new ideas, which Ausubel referred to as *anchoring ideas*.

The short training sessions did not allow Miller time to practice the new skills to absorb what she had been shown. There was not have time to make mistakes, get help, and try again. Miller described her experience:

"Your institution offers professional development training and things like Smart Board and Blackboard, and I've sat through a few of those for those two-hour long courses and gotten excited about it and then really had trouble in the application phase, when you come and try to get to use it. I have not really put the time or the energy into doing that."

Nancy's situation was very similar to Miller's. Although she used Blackboard for the theories course, besides posting her syllabus, she only used it to post a couple of announcements. Learning to incorporate constructivism in her online pedagogy was a challenge for Nancy. She lacked the time to learn the technology, due to her full teaching load in addition to her involvement in professional societies at the leadership level.

Pedagogy

Several of the instructors had not developed pedagogy that integrated technology. None of them mentioned being introduced to technology by their university instructors. Although e-learning was in use in the late 1980s, the instructors who finished their doctorates ten or more years ago did not have classrooms with the computer technology that is widespread today, such as podiums designed for laptops, classroom Internet connections, or computer projectors.

E-learning is a relatively new phenomenon. Personal computers did not come into use until the late 1970s. Yan, et al. (2003) described e-learning as "a learning system that uses various electronic techniques as its primary medium for learning." According to Alonzo, et al. (2005), e-learning is basically an alternative way to teach and learn that has not yet incorporated the pedagogical principles of teaching. Govindasamy (2002) found that software tools for e-learning over the Internet were found not to extend to pedagogy; therefore, the pedagogical manner for teaching with these tools was left to the instructors.

Although the instructors in this study had become adept at technology for personal use, such as Word, email, and the Internet, the instructors did not have equal skill levels with using technology in the classroom. Only a few of the instructors had mastered a course management system.

Pierson (1999) found that in order to fully integrate technology in teaching, the instructor needed to be firmly grounded in three types of knowledge: pedagogical, content, and technological.

"Technology in the hands of an exemplary teacher is not a foregone conclusion of integrated use. Unless the teacher views technology use as an integral part of the learning process, it will remain a peripheral supplement. True integration is the intersection of multiple types of teacher knowledge and is likely as rare as expertise. (p. 225-226)"

The instructors were clearly experts in the areas of subject content and pedagogical knowledge. Several were very experienced in the use of course management systems. However, for the vast majority, there was a distinct lack of *technological pedagogical knowledge* (*Pierson, 1999*).

An example of a lack of technological pedagogy was Carrie’s previous attempt to use discussion boards. Carrie was very experienced in her field of study, and had extensive training in the course management system, WebCT. She had successfully implemented discussion boards with classes before, but because her method of assessment was highly individualized and time consuming, she had stopped using discussion boards years ago. The two online instructors, Ed and Ken, did not emphasize grades for discussion board postings. Ken’s assessment took place within the discussion board. Ken chose one idea to comment on, and posted it to the whole class. Ed actively participated in the discussions. He explained to the students that they would not receive grades for the postings, but their active participation and quality of responses could boost their grade a point or two, if they were on a borderline between one letter grade and another. These types of assessment encouraged participation and did not require extra time on the part of the instructors. Research shows that teacher participation in discussion boards increases student engagement (*Durrington, Berryhill, & Swafford, 2006*).

How Did They Teach?

Figure 6 shows the range of teaching methods used as reported by the instructors. All of the instructors were aware of the importance of, and therefore used, a variety of methods to work with students who had different learning styles.

	Lyle	Nancy	Laura	Ken	Mark	Miller	Neal	Carrie	Ed
Teacher Centered									
Lecture	x	x	x		x	x	x	x	
Multiple choice tests	x			x	x	x	x	x	x
Demonstration	x					x	x		
Large class discussion	x	x	x		x	x	x	x	
Student Centered									
Students teach students				x		x			x

Group projects			x	x					
Online discussion				x					x
Student presentations			x			x			
Instructor scaffolding								x	x
Experiential exercises	x		x			x	x		
Reflective writing	x	x		x			x		x
Small group discussion		x	x			x		x	

Participants’ levels of technology use in the CBAM Levels of Use of an Innovation.

The pedagogical methods in *Figure 6* give a picture of how each instructor taught. The teaching methods are divided into two types: teacher centered and student centered. Teacher centered methods, such as lecture, presentation, and demonstration, are used by the instructor to present information to students. Large class discussions are considered teacher centered when the instructor asks questions of the class in general to lead them to a specific right answer. Multiple choice tests require the student to choose the correct answer from a short selection of possible answers. These methods provide little opportunity for the students to express their ideas and demonstrate that they have integrated the information into their practice. In Bloom’s taxonomy of learning, this kind of transaction is at the lowest level, *Knowledge* (1984).

Learning theorists, such as Bloom and Vygotsky, discuss a higher level of learning that indicates that the student has synthesized the knowledge, and is able to use it in new situations to solve new problems. Situated learning theory also supports the idea that student-centered teaching methods lead to better integration of knowledge (*Lave & Wenger, 1991*). Bloom referred to this stage of knowledge acquisition as high order thinking, or critical thinking. Vygotsky’s theory of constructivism concerns the interaction between two people in which one helps the other to understand something by providing just the right scaffolding, or assistance, at the right time, to help a student solve a problem she or he was unable to solve completely on their own. This takes place in social interactions between a student and an instructor, or between two students.

Learning theorists also consider learning styles as an important aspect of teaching. Howard Gardener’s theory of multiple intelligences (1997) leads to the idea of using a wide variety of teaching methods in order to reach more students. Therefore, it is good pedagogy to use multiple methods. The instructor who used the greatest number of instructional methods was Miller, who taught a hybrid course. Of the face-to-face instructors, Laura used the greatest variety of teaching methods, followed by Neal. Of the online instructors, Ken used the greater number of teaching methods.

Overall, the instructors who used the greatest number of student-centered methods were Ken, Miller, Ed, and Laura. Each of these instructors believed that a high level of interaction with the students and among the students was important to learning.

Instructors as Technology Experts

Another issue that confronted the instructors was that the students turned to them as the technology experts. Most of the students went directly to the instructor for technology troubleshooting, which added significantly to the instructors' duties. Most of the instructors, however, had not developed a high level of expertise with the software, and did not have a repertoire of techniques to draw from when faced with technology problems. This unexpected demand from the students increased their teaching load, and caused one instructor to abandon Online Day halfway through the semester.

Lack of Experience

Miller talked about difficulties some of the students had with learning to use Online Day:

"I would say the start up for about 5 of the 25 students was a little rough. They were pretty panicky, pretty scared when they couldn't post or when they had a cookie that wouldn't allow them to do anything and they couldn't get the videos, so that was a problem. I don't think we really had any others. I think once everyone was able to access the videos and do their postings it was very smooth. And because it's hybrid, because they come in every week, every other week, any time they have a problem it's really fairly quick to deal with it. "

Miller's solution to the students' problems was reactive rather than proactive. Rather than preparing the students for possible problems and how to cope with them, she addressed technology problems that students had encountered in class. Although the students learned how to function within the system over time, there were times that they had to wait a week until the next class meeting to get help with the technology, and experienced some frustration in the process.

Instructors' Technology Support

Ed did not have the technical skills needed to teach an online course. However, he was able to teach online because he had the support of dedicated technical staff who worked with instructors who teach online. Ed had high praise for the technology expert, Tim, who worked with Ed extensively. Tim not only filled in the course webpage template for Ed using Ed's syllabus, but he also communicated with the publisher's technical staff to solve problems for Ed and the students. Ed recounted his relationship with Tim:

"The guy's personable, he's helpful, you can't offend him, he works well, and he solves problems very quickly. And I would say I probably could not have done this without him. So technical support, unless you are a master at programming and online instruction, you've got to have the technical support in-house. I couldn't have done it otherwise."

Although Laura and Miller were new to using any kind of course management system, they showed determination to learn to use Online Day by making use of tutoring over the phone provided by the publisher. This service was offered to all the adopters of the Online Day material, as well as the direct phone number to the company who created the software. The tutor coached them in filling out the website class template as well as posting their assignments and the course syllabus.

Levels of Technology Integration

The burning issue in this study was to what degree the instructors integrated this new technology with their teaching. In this section I have used two instruments to inform my development of tables of the participants' levels of technology implementation. The first chart was created using the Levels of Use of an Innovation which is part of the Concerns Based Adoption Model, or CBAM (*Hall & Loucks, 1977*). CBAM is a well established measurement of technology adoption by teachers in K-12 education which has been effectively used in educational research over the past 31 years. The second chart is one I created by listing some major components of the Online Day website. It clearly shows how many of the components were used by each participant to indicate their levels of technology integration.

The Concerns Based Adoption Model

The Concerns Based Adoption Model (*Anderson*, *1997*) is a widely applied theory and method for studying the process of teachers integrating a new innovation. It is concerned with measuring and describing the process of change experienced by teachers involved in attempts to implement new curriculum materials and instructional practices. This study will be using the Level of Use dimension to examine how the participants incorporated the Online Day course materials. Initially there were only six levels of use in this tool, but over time it has been revised and expanded to eight levels:

- Level 0--Non-use.
- Level 1--Orientation; seeking information about the innovation but not yet decided to adopt.
- Level 2—Preparation; actively preparing to use the innovation, but not yet used it in class.
- Level 3—Mechanical; beginning to implement change and struggling with logistics; teacher centered.
- Level 4a--Routine Use; establishing a pattern of regular use.
- Level 4b--Refinement; changing innovation to be more student centered.
- Level 5--Integration; collaborating with other teachers to benefit students.
- Level 6—Renewal; needing to make major changes in the innovation or explore alternative practices.

	Lyle	Nancy	Laura	Ken	Mark	Miller	Neal	Carrie	Ed
Level 6 - Renewal					x			x	
Level 5 - Integration									
Level 4b - Refinement									
Level 4a - Routine	x			x		x	x		x
Level 3 - Mechanical use							x		
Level 2 - Preparation			x						
Level 1 - Orientation		x							
Level 0 - Non-use									

Participants’ levels of technology use in the CBAM Levels of Use of an Innovation.

Although these categories are general, they are clearly defined. However, CBAM was created in 1976 for use in evaluating K-12 teachers' learning to adopt technology. The assumption at that time was that all the teachers were just starting to use technology, so a linear progression from a very basic level of use made sense in that context.

In this study, the participants were experienced college instructors who had been using computers for as many as 18 years in daily life and in teaching. In attempting to place the instructors on the chart at the appropriate levels, it became clear that the categories of CBAM, beginning with such early stages of linear progression of learning, did not accommodate the sophistication the participants experience with technology. Researchers Leithwood and Montgomery (1987) identified the linearity of the CBAM's level of use tool as a shortcoming, and this criticism applies to this study. For example, there was great variation in the levels of implementation within the category of routine use. Of the five participants at the routine level, Miller, Ed and Ken implemented the videos, the online quizzes, and the discussion board, whereas Neal and Lyle used only online quiz component.

Category Five, collaborating with other instructors to make the innovation more student-centered, did not fit the participants. The nine instructors worked alone, in the sense that no one else on campus was using the online course package. This differs significantly from the K-12 environment in which teachers adopted the innovation as a group by grade, thereby having a discreet, identifiable cohort.

Another difference between the college and K-12 environment was that the school facilitator was usually the school principal, who tells the teachers to adopt the innovation. In this study, the college instructors all voluntarily adopted, with the possible exception of Laura, who was encouraged to adopt by her supervisor. For the rest, the Intellipro staff or the telephone assistant could have served as facilitator, but half did not contact either of them.

The Level 6 instructors, Mark and Carrie, did not move through the categories in a linear way. Carrie was not able to move into Level 4b (Refinement; changing innovation to be more student- centered) or Level 5 (Integration; collaborating with other teachers to benefit students), because the instructional technologist informed her that she had to use Web CT as the course management system, and simply embed the link to Online Day within it. This actually caused the course to become less student centered, because it added extra navigational layers for the students to negotiate. The same situation evolved with Ed when he was preparing to teach with the Online Day resources the fourth time.

It became clear that the linear model of CBAM did not fit with college level instructors who had more autonomy and possessed varying levels of technology experience, which was also questioned in a review of CBAM literature (*Anderson, 1997*). My conclusion resonates with a study that found CBAM inadequate to fit a more complex environment (*Vandenberghe, 1983*).

Use of Online Day Components

In order to have a clearer understanding of the participant's level of technology use, *Figure 8* was constructed to show the most frequently used components of the Online Day website. The categories refer to the actions taken by the instructors to implement the various components: customized course website, posted syllabus; created weekly quiz from test bank; assigned online videos; posted weekly discussion board topic; posted comments on the discussion board; received assignments online, and supplemented with other technologies.

The most frequently cited reason the participants gave for adopting the online version of the course materials was to give students access to the case videos. However, the most universally adopted online component was the test bank for creating chapter quizzes. In this section I will discuss the components used and the reasons why the instructors chose to use some components and not others. In addition to the components most frequently used from the Online Day website, a category has been appended to indicate that instructors supplemented the technology offered on the website with other technologies. For example, some instructors brought departmental videos to the class, they assigned the students to listen to online podcasts, and one instructor even assigned students to collaborate in small groups to create case videos that were shown in class.

By indicating which components were used under each instructor's name, the chart reflects the amount and variety of technology used in their teaching. The data from this chart will be combined with other data on each instructor to create a composite view of how they taught. The collective data adds to our knowledge of which parts of Online Day were able to be integrated with the instructors' teaching.

The students in these graduate courses came from varied backgrounds, had a wide age span, and each one had their own unique combination of learning skills and intelligences, as described by Gardner (1984). In order to reach a diverse group of students in a class, it is considered good pedagogy to use a variety of teaching methods and techniques.

	Laura	Ed	Lyle	Nancy	Neal	Miller	Carrie	Mark	Ken
Customized course website	x	x	x		x	x	x	x	x
Posted syllabus	x	x	x		x	x	x	x	x
Weekly quiz from test bank		x	x		x	x	x		x
Assigned online videos	x	x			x	x	x	x	x
Weekly discussion board topic		x				x			x
Posted comments on discussion		x							x
Received assignments online							x		x
Instructor's own technologies	x		x			x		x	

Components of Online Day implementation by the instructors.

A notable correlation was that the instructors who used the Online Day materials the least (Nancy, Mark and Laura) claimed that their biggest challenge in teaching the course was to prepare the students for the state licensing exam. Thus, their efforts to teach to cover the material on the test took precedence over using the Online Day resources, even though the Online Day resources were designed to prepare students for the exam as well.

Online quizzes

Six out of nine instructors required students to take the weekly quizzes created from the test bank. Lyle and Neal felt that the online tests helped to ensure that the students read the material before coming to class, which contributed to a high level of participation in the class discussions. Neal believed that the online tests contributed toward the cohesiveness of the class. Test grading was usually a chore for which Neal often procrastinated. He was very pleased that the automatic grading of quizzes gave the students instant feedback. Students were also able to check their quiz grades anytime, which let them know where they stood. The online quizzes were taken outside of class resulting in more time that could be devoted to interpersonal communication with and among the students. The online quiz component was most like traditional pedagogy than any other of the online components. Rather than adding to their work, it saved the instructors the work of preparing questions and grading tests.

Videos

The chapter videos were the second most popular component. Streaming video was used to deliver the five case videos to the students directly over high-speed Internet connection. Several instructors (Neal, Ed, and Miller) mentioned how important the videos were to the students in helping them understand the theories in action. According to Neal, the only way to see therapy in action was to be the client, to be the therapist, or to watch it on video.

However, not all students were able to access the streaming videos from the website. Some of the students did not know how to download the video player software to their computers, some did not have high-speed Internet connections, some did not purchase the book which gave them access to the software, and some did not own a computer.

Neal created a work-around to deliver the course videos to his undergraduate students. He obtained copies of the videos on CD for the students to watch on reserve at the library. Mark and Carrie both dropped the requirement for students to watch the videos on their own, because two or three students in each of their classes could not access the video online. Rather than have students working on an uneven playing field, they chose to drop the assignment.

Laura was ambivalent about whether she should assign the students to watch the videos or simply recommend it, because two students were not able to access them with their dial-up connections. However, she recommended but did not require that they watch them, and they later discussed the videos in class.

Miller assigned the students to watch the videos from the website outside of class. Additionally, she showed some videos in class from the departmental library to help explain a particular theory. Showing videos in class had always been problematic for Miller, because there was never enough time to show them in their entirety. This caused her to skip around in the video, trying to show highlights. She was unhappy that the students never had the opportunity to watch a whole session with a practitioner and client. By having the videos on the web, Miller had hoped the students would be able to take their time to watch them and see it being performed. It is ironic that the most desirable technology feature of Online Day failed to perform as expected for most of the classes.

Discussion Board

Only three of the instructors, Ken, Ed and Miller, used the discussion board feature, the most complex pedagogical tool in Online Day. Discussion boards offer an environment in which each student can have a say and the students can get to know one another through their writings (*An & Kim, 2006; Durrington, et al., 2006; Lewis & Abdul-Hamid, 2006; Moore, 1989*). Because student contribution to discussion is required, many more participate than in face-to-face class discussions. Because the online messages are saved in the discussion board software, students' postings remain visible for the entire semester. “The permanency of this electronic text, however brief, and ability to comment on or revisit it are motivating aspects of online learning” (*Bonk & Cunningham, 2003*).

The instructors in this study faced some challenges in how to engage the students in online discussions. One challenge was to create provocative discussion topics that would stimulate the students' thinking. Although reflective topics for each chapter were included in the e-textbook, Miller chose to create her own discussion topics. Ed and Ken relied on the reflections and case studies provided for discussions. Another challenge was how to encourage students to respond to one another, instead of addressing the instructor in their postings. The third challenge was deciding what degree the instructor should participate in the discussion, and finally, how to assess student participation.

Ken and Ed reported free-flowing discussions online, where students felt free to challenge and disagree with one another over time. They each hoped the online discussions would result in students learning from each other. The medium provided the opportunity for the students to read all the class essays and see where their work fit into the body of work of their colleagues. Ken felt that through reading each other's papers, the students seemed to discover new ideas that they had not thought about before. Although the students were using the same resources, seeing what others chose to focus on broadened their understanding of the topic.

Ed reported that the students challenged each other's opinions within the discussion board use. This exemplifies evaluation, one of the signatures of higher-level thinking on Bloom's taxonomy of learning (*Bloom, 1984*).

Miller was much more prescriptive in her instructions to students using the discussion board. She included in her syllabus a detailed rubric spelling out exactly how the students should post an essay and comment to one other student in the class. She recommended that each time they commented on a fellow student's work, they should choose a different student. Miller wanted to ensure that the discussion board activities enabled the students to learn from each other. It gave them the opportunity "to address arguments of students across the class over the course of the semester," and promoted the development of close relationships.

Miller never posted her comments to the discussion board, but chose instead to respond to them in writing. "I don't want it to be public. I often challenge their thinking and their opinions." Clearly, Miller did not want to embarrass students by challenging the students in front of their peers. But receiving individual responses, the students were not able to reap the benefit from Miller's collective comments or her responses to other individuals.

In the area of assessment, Ken had developed a very streamlined way of responding to student postings on the discussion board. He had become very familiar with distance learning and online discussions while earning two of his advanced degrees. Ken felt the most helpful aspect of Online Day was the discussion board, where students could post their three-page reflective essays and comment on each other's work. Ken's technique for responding to the students' essays without becoming overwhelmed was to comment on one aspect of each discussion to the whole group, which stimulated further discussion.

All three instructors who used the discussion board reported high levels of student satisfaction with the course. Each reported seeing trust develop between students over the semester. Miller and Ken noticed a definite improvement in the students' writing skills over the term. Each required the students to post frequently, and to comment on other students' writings. Ken saw the students develop their individual voices online, and noticed how the students' writing became less formal and more personal as they opened up and shared their experience. Miller stated that in her hybrid course, the students showed more confidence in class discussions as the term progressed, which she attributed to their experience of defending their positions on the discussion board. Ed was pleased with the students' confidence and trust growing to the point that they were comfortable challenging each others' ideas.

Barriers

The instructors faced a variety of barriers to adopting Online Day ranging from the software design, their lack of skills in using technology, and their lack of experience integrating technology into their teaching to student's lack of technology skills and access to computers and high-speed Internet.

Online Day Software Design

Intellipro, the developer of the Online Day materials, had already applied their web-based course management system to college courses in disciplines such as finance, math and science. The Online Day course in psychology was Intellipro's first venture into developing course materials in the humanities or social sciences. This is an important consideration for several reasons in thinking about how digital materials are best presented for teaching in the different disciplines. First, the examples given for the instructors to learn how to set up a course were all from science and math courses. Because social science instructors usually have less computer expertise than their counterparts in math and science, cogent examples are important to understanding how the software *works. The psychology instructors would have been better served with more instructions and cues within the interface to guide them through the process of setting up their courses.*

Instructor Module not Intuitive

Several instructors commented that the course management software was not intuitive. Ken noted that the students did not seem to have any trouble navigating the program. However, he experienced some minor problems using the menu when he was setting up the course. “From the instructor’s perspective, the menu was hard to follow. In fact, I had to consult with tech support quite often to figure out exactly how I could get to what I needed when I was setting up the syllabus.”

In the same vein, Nancy found setting up the course bewildering. “I actually looked at it, and then gave up pretty quickly when it wasn’t extremely intuitive. I’m not a computer person, so if it’s not ‘push this button to do this,’ I’m lost.” Nancy talked about running into difficulty early in the process of setting up the course:

"I think I even had trouble figuring out if I had registered for the course. It was telling me I needed to register again. It’s like, I thought I did that. It seemed to me in my ideal world it would have had, kind of like Blackboard does, “This is your course. Click on this. These are the little icons that you can use for the course. This is the discussion board, this is the, you know, the course documents, push here to upload.” "

Nancy was already familiar with Blackboard, and expected other course management software to operate in a similar way. When she realized how different it was to set up the Online Day website for her class and how time-consuming it would be to learn, she confided, “There’s that crunch of all the things that you’re doing in addition to your teaching, and so I just didn’t take the time.”

Learning with Words or Numbers?

An underlying difference between social science courses and math or hard science courses is that the subject matter is based on thoughts and ideas expressed in words rather than numbers. An example of the problem of fit for the website with humanities and social science courses was the built-in test bank and automatic grading component.

Assignments in the humanities and social sciences are more often essays than problems with a right or wrong answer. All of the participants in this study used essay questions as assessments. Grading of essays requires a subjective assessment by the instructor. Therefore the grading system built into the program could not work for all assignments. It was built on a test bank of multiple choice questions covering each chapter. While weekly multiple choice quizzes may ensure that the students have read the chapter, they may not show in as comprehensive a way that the students have integrated the new knowledge as an essay question would. When the textbook author explained this to the publisher, Intellipro did create a way for students to submit essays from within the website. Still, there was no accommodation for adding grades from these assignments to the automatic grading component.

Reasons for Technology Avoidance

The tendency for instructors to avoid certain online components in Online Day can be attributed to three major reasons. First, many did not have the time to try out all of the components and discover all the resources offered that they could build into their courses. Second, most of the instructors and their students had experience with a course management system, and felt frustration in learning to use a new one that worked differently. And third, they had to learn how to incorporate the new resources into their course designs. This meant they had to create new assignments and ways of assessing them.

Nancy did not use the online resources with her students. She decided not to adopt the Online Day materials the following semester, but to return to the textbook she had taught with before. She summed up her experience:

"It really looked good when I had it demonstrated, but once again, I didn’t have the time to put in to figure it out. Especially when I realized the students weren’t going to have access, I didn’t want to have an unlevel [sic] playing field with the students."

A number of Nancy’s students lived in rural areas where high-speed Internet connection was not available. This meant that they could not watch the streaming videos, which was the most appealing element of Online Day to Nancy. Because of this technical difficulty and because of being pressed for time, Nancy decided not to use Online Day the following semester, but to return to her old familiar textbook she had used before.

The instructors expected Online Day to look and act like course management systems they were already familiar with (i.e.--WebCT or Blackboard). Because there are no industry standards for interfaces, the interface most widely subscribed to becomes the standard by default. The instructors felt it was a waste of their time and their students’ time to have to learn both Blackboard or WebCT and a new application which is different, but basically does the same thing.

Carrie articulated this difficulty when she was struggling about whether or not to keep using Online Day for her summer course, before she worked out a compromise with the technology support expert:

"I’ve chosen not to use the website for my summer class. And I know you’re going to ask me why. I think the learning curve for our students, especially in the summer, because they’re so used to using WebCT, they can get on WebCT and work on that in their sleep. My students this semester, and they’ve taken several courses that are Web CT, the learning curve was a little steep. It’s not difficult, but it’s just when you’re, for several semesters, used to one environment in terms of technology and then you move to another environment, I mean it was almost like – they were grateful for the book not costing an arm and a leg, they really liked the PowerPoints and being able to watch the videos, and all of that, but by the time they got through “huntin’ and peckin’ around,” I don’t think I want to do that for the summer."

The majority of the instructors did not understand how to design assignments using the technology. There was no instruction in using the software given in the Online Day Instructor’s Guide. The instructors with little online teaching experience lacked knowledge of using the technology to engage the students in learning. This lack of technological pedagogy caused them to use their old methods rather than to struggle with using something new. A third reason the instructors didn’t use all the technology components offered in Online Day was their lack of efficient online assessment. Carrie said that the inordinate amount of time she had taken in previous courses reading, responding to and re-reading student postings had turned her off using discussion boards altogether.

Students’ Lack of Resources

The students were the source of some of the barriers to technology integration. Due to some of the students’ low economic status which resulted in non-purchase of the textbook and lack of access to a home computer and/or high-speed Internet, the instructors could not depend on their accessing the Online Day materials. Several instructors dropped assignments that required high-speed Internet because there was not universal access to the resources. They were committed to providing an even playing field for all students in the class.

Roughly half of the students were returning to graduate school after years of working full-time. Some of them were at a disadvantage because they had not been exposed to course management systems, e-learning, or the expectations at universities today that students enter the program with a certain level of expertise in using computers.

Social aspect of learning

Several of the instructors believed that online teaching was inadequate to the teaching of theories and practice in counseling psychology. They felt strongly that face-to-face experiential instruction was crucial for the students to integrate the course content into their counseling repertoire. Although they were teaching a theories course, they felt it was essential to student learning to see the theories of counseling put to use, and to be able to practice the skills with other students with the guidance of the instructor in class.

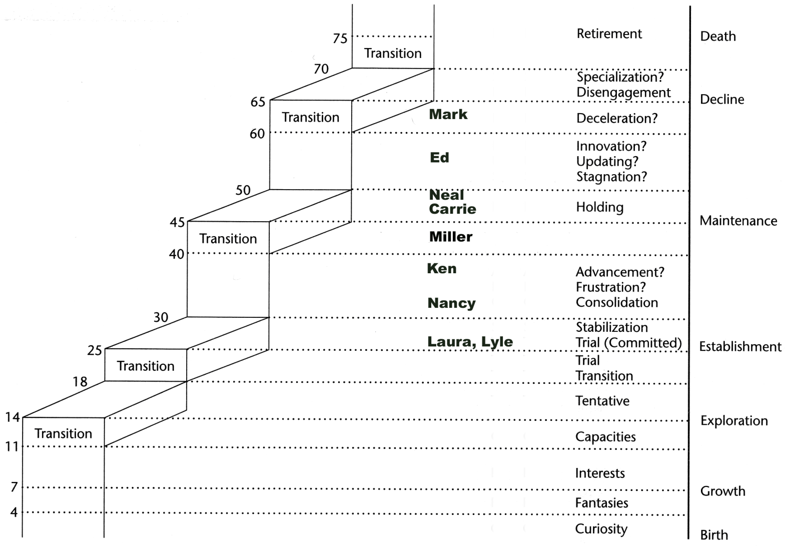
The instructors in this study believed that the social aspect of learning was very important. Miller used icebreaker exercises at the beginning of the semester with her class to help the students to get to know each other. Even though Ed was teaching the theories course online, he felt it was not the best way to teach it. He did not like the fact that he was unable to meet the students in person. He and Lyle felt that totally online classes did not allow for the kind of communication that could happen in a face-to-face discussion. He felt there was value in meeting together as a class and discussing things. However, Lyle believed that the online text, the videos and the research articles included in the Online Day served as important resources as an adjunct to the classroom experience. Lyle's point is supported by educational research which finds a blended approach to learning that incorporates social constructivism and information-processing psychology enhances student learning (*Alonzo, Lopez, Manrique & Vines, 2005*).

Career Stage and Age

The most significant determinant of technology integration for the participants in this study was age and stage of life. An unexpected correlation was that the youngest instructors did not embrace technology in their teaching to the degree that some of the oldest did. To give a clear idea of the phases of career the instructors fell into, Donald Super's career theory was employed.

Super's Career Ladder

Donald Super is one of the most notable contributors to the field of career development, having spent half a century creating a theory that departed from traditional trait-factor theories, and instead was based on life stages (*Anderson & Vandehey, 2006*). *Super's Career Ladder* is drawn as a series of steps that represent the different stages of psychological development of a careerist (*Super, Savickas, & Super, 1996*). In this model, each stage is completed before moving on to the next. A career is seen as developing over a lifetime, and may consist of a number of different jobs overtime. Super's diagram shows the progress of psychological development over a person's lifetime. Starting with Birth, the categories progress through Growth (ages 4-11), Exploration (ages 18-30), Establishment (ages 30-45), Maintenance (ages 45-65), Decline (ages 65-75), and Death (ages 75 and over). Because this study focuses on the instructors' working years, the early life stages are not dealt with. Starting with *Establishment* and ending with *Decline*, the instructors' current position on Super's Ladder will be explored.



Super’s Career Ladder (Super, Savickas, & Super, 1996) with instructors’ names inserted at the appropriate developmental stage of their careers.

Establishment Stage

The instructors at Super’s *Establishment* stage of their teaching careers were Laura, Lyle, Ken, and Nancy. Laura was the least experienced instructor of the group. Although she was completing her first year as a full-time instructor, she was already fully engaged in professional development activities which would contribute toward her tenure requirements. Her outreach work focused on getting her students involved in professional organizations and supporting them in presenting papers at conferences. At the prompting of her supervisor, she adopted the Online Day course materials. However, she did not become very familiar with the online resources. She had taught the theories course before using a different textbook, and expressed frustration with the burden of learning not just a new textbook, but a whole new way of teaching. She expressed mixed feelings about whether to stick with the Day textbook or to go back to another text with which she was more familiar. Laura represented the *Trial-committed* phase of the *Establishment Stage*. She felt compelled to use the Online Day materials, but her workload and tenure-related activities held her back.

Lyle was also a neophyte to teaching, in the same stage as Laura. For this course, he did adopt the online test bank to create weekly quizzes, but did not attempt to incorporate any other features of the Online Day program. He was not very comfortable learning new software, and he enjoyed the more traditional lecture format in teaching. Lyle expressed an interest in learning more about using the Online Day resources through a future workshop at a professional conference. He was interested to hear from others about their experiences in teaching with it. Like Laura, Lyle was also in *Establishment,* at the *trial-committed* phase of his career in his second year of teaching.

Before Nancy entered the field of psychology, she had a professional career as a lawyer. She was a few years older than Laura and Lyle. At the end of her sixth year as instructor, Nancy was facing tenure review. She had only been working at a Research One level institution for a year, and there were expectations for her to provide professional leadership at the national level. Most of her energy was directed toward the publication of a book and several articles for journals, serving on the editorial board of a professional journal, and presenting papers at conferences. There was little time left for Nancy to devote to her teaching, much less learning new course software.

Nancy had seen the Online Day course demonstrated at a conference, and it looked quite simple to use. However, when she tried to set up her class in the Online Day website, she had trouble getting started. She was disappointed that the software did not include prompts, like Blackboard provides, to lead her through the process of setting up the course. In addition, she discovered that her off-campus classroom had no Internet connection and that the students did not all have computer access from home. Finally, she found out that some of the students who did have computers at home did not have high-speed Internet connections which were necessary to view the streaming case videos from the website. At that point Nancy abandoned the idea of using the Online Day resources altogether.

Nancy used Blackboard to post announcements and some PowerPoint presentations from an earlier class on theories using a different textbook. She had recently attended a course in hybrid teaching which covered such topics as how to engage students in online discussions and how to assess them. She thought meeting face-to-face only every other week would be helpful both for her and for her off-campus students, because many of them had to drive an hour or more to reach the off-campus classroom. Nancy was completing the *Establishment* stage-*Consolidation* phase and was moving into the *Advancement* phase of *Establishment*.

Ken, a recently retired counseling practitioner, was in his sixth year as a college instructor. Ken was teaching for enjoyment, the modest income, and the benefit of being involved in a professional community. A friend of his on the faculty of the college had been wooing Ken to come teach with him for a number of years. When Ken finally retired and found full-time retirement unappealing, he decided to try his hand at teaching. His schedule was flexible, relieving him of the tightly-scheduled day he had experienced in private practice for over 30 years.

For Ken, by far the oldest of the three, tenure was a non-issue. He taught the course online, but he had the opportunity to work with each of his students face-to-face during a week and a half intensive residency at the beginning of the semester. This gave him time to develop relationships with each student, and to help them with any technical difficulties they experienced with the course software. The entire college only had 60 students enrolled, so his classes were very small. The previous semester Ken had taught with the Online Day materials for the first time. The class had 13 students. Because of the small teacher/student ratio, he could afford to spend many hours exploring the online resources and communicating with the students online. Ken found himself quite happily busy from sun-up to sun-down without a schedule. Regarding the Online Day course materials, Ken said that he would warn other instructors that it took quite a while for him to discover all the richness of the online program. He felt that the book was very well structured, but the software was not intuitive to learn. Although Ken had cycled through Super's career stages, he was new to the profession of teaching. In his new job, like Nancy, he was also moving from *Establishment/consolidation* to *Establishment*/*advancement*, but without the marker of tenure status.

For the *Establishment* stage instructors, whether or not they were engaged in a tenure effort made a difference in their use of new technology. The tenure-seeking instructors were also less flexible in their teaching styles. This could be at least partly attributed to how heavily they were scheduled with work related activities. Because Ken's workload was significantly lighter, he was able to spend the greatest amount of time learning and using Online Day.

Maintenance Stage

Carrie and Neal were in the *Holding* phase of the *Maintenance* stage of Super's Career Ladder, having taught for 10 to 15 years. Miller was just below them on the ladder in the *Transition phase* between *Establishment* and *Maintenance*. For this course, both Carrie and Miller taught in a hybrid format, using a number of the online components in their teaching. Neal, on the other hand, taught face-to-face employing teaching methods he had developed over the years. The only part of the Online Day he incorporated was the online test bank.

Carrie had used the WebCT course management system for 10 years. Over that time, she had used discussion boards, created online quizzes, and taught classes completely online. Carrie taught a hybrid course which met physically only three weekends, but each of those weekends contained 13 hours of class time. She was able to show them how to set up their online accounts for the Online Day resources in person. The classroom provided each student with a laptop and Internet connections needed to use the course website. Carrie was very invested in her students, and kept close touch with them by email between class meetings. She was persistent in contacting the experts to solve the technical problems the students encountered in using the program, after years of working with the in-house technology expert on campus.

Carrie became unhappy with the frustrations the students encountered in taking the online quizzes and becoming familiar with the online course environment. It took energy she could have put into teaching to try to resolve the technical problems for the students. Most of Carrie's students had already mastered working in Blackboard, but for the theories course they had to learn a new system. This factor alone caused Carrie to rethink using the online course materials for the following semester. She decided to use WebCT for the course shell, and to include a link to the Online Day materials. She would require the students to watch all the videos and to take the practice tests as well as the online quizzes. Carrie, though somewhat disheartened by this compromise, felt the content of the Day textbook and website was worth adapting for the future, and was willing to expend the effort. She represented the *Holding* phase of *Maintenance*.

The second *Maintenance* stage instructor, Neal, taught the course face-to-face. Neal had reviewed the course package for a journal, so he knew about the content and the various technology components. However, Neal only required the students to take weekly online quizzes and watch the course videos. He did not attempt to use the discussion board, or to have students submit assignments on the website. For the final exam, Neal gave the students an online portion from the test bank which counted as two-thirds of their grade. He, like Carrie, represented the *Holding* phase of *Maintenance*.

Miller had never used technology in teaching before. Although her colleagues had all begun to use technology to some degree, Miller had taught face-to-face classes and prepared printed copies of all the supplementary reading which were sold in the bookstore. Because she had been away from the classroom for a number of years serving administrative duties for the department, Miller had missed out on much of the technology training offered. She had recently been introduced to Blackboard in training sessions, but when she tied to implement it on her own, the difficulties outweighed its perceived value. Miller decided to teach a hybrid course in her last semester of teaching in the northeast, before moving to a larger university setting in another state. Miller devoted enough time learning the software and the course content to become proficient in implementing it. She used use of most of the online components with her hybrid class, including the discussion board. Miller had moved beyond *Establishment* into the *Transition* phase leading to *Maintenance*.

Each of these mid-career instructors represented a different aspect of the mini-cycle of the *Maintenance* phase. While Carrie was scaling back from teaching online to teaching a hybrid adopting a holding position, Miller was advancing her career and taking a bold step forward in her use of instructional technology. Neal, the only instructor who taught at the undergraduate level, seemed content to continue teaching in his usual style, adopting only the piece of technology that most closely resembled his usual teaching methods.

Decline

Ed and Mark had each worked in the field of counseling psychology for thirty years. According to Super’s Career Ladder, they were in a transition period between *Maintenance* and *Decline*. Ed had taught for 18 years, interspersed with years of as counseling practitioner. Although Ed had never before used technology in teaching, he decided to teach an online course at the request of his program chair. His university was in competition with three other universities in the region for students who wanted to take courses at a distance, so online courses were in demand. Ed’s online teaching was made possible because of the pre-packaged course materials and the availability of frequent help of the technology expert on campus. Ed could be considered to be in the *Updating* phase of *Decline*, as he was finding a niche in teaching with Online Day.

Mark, an older instructor in the *Decline* phase of career, was an exception to the pattern of the oldest instructors using technology the most. Although he started out the semester with the intention of using most of the Online Day components, by the end of the course he had abandoned them. He had been an early adopter who had experimented widely with technology in his teaching. Mark had taught the theories course for so long, he was not dependent on any one textbook. He tried using many of the Online Day components, but environmental factors in the aftermath of hurricane Katrina forced him to return to traditional teaching methods. Mark was stepping back from innovating and relying more on his traditional ways of teaching. For these reasons, Mark fits into the *Deceleration* phase of *Decline*.

In summary, the two instructors who taught online courses and utilized the greatest number of Online Day components were older, and either retired (Ken), or close to retirement (Ed). They were both motivated to seek online teaching materials because they were committed to teaching the theories course online in the near future. Their motivation helped them to persevere in using the courseware even though they met with some obstacles. Being able to use online materials saved them time both in creating their courses, and in administering them. In contrast, three instructors who used the fewest Online Day components were in the *Establishment* phase of their careers and were seeking tenure (Nancy, Laura, and Lyle). Tenure seeking activities severely restricted the amount of time the new instructors could devote to learning new software. Their motivation to use Online Day was to enhance their teaching rather than to serve as the delivery mechanism for the course. When they met with obstacles, they did not persist in seeking solutions. Their degree of commitment to using the courseware was not high.

Recommendations for Future Research

This study raises important issues for courseware publishers, and for university administrators. In general, the courseware publishers should take great care in the selection of software producers to make sure that the software design is correct for the discipline, that the nomenclature fits the discipline, and that the product will work with existing campus-wide course management systems; otherwise, the courseware will not be widely adopted. University administrators should examine policies around bringing the computer skill levels of both students and instructors to a level where they can make use of widely used learning technologies.

Recommendations for Courseware Publishers

1. Build software to be used inside campus-wide course management systems.
2. Create media short segments that can be either used in the classroom or on a computer at home without access to high-speed Internet.
3. Design software with written and built-in instructions.
4. Tutorials for instructors should use examples from the appropriate discipline to engage their interest.
5. If high-speed Internet connection is required to access course materials, provide alternative ways to access them.
6. Keep in touch with campus technology experts and instructors to find out standards in use and potential design problems for the users.
7. In designing course software, test interface menu terminology on potential users to achieve wide understanding.
8. Distribution of courseware needs to work within already established channels of university textbook purchasing.

Recommendations to University Administrators

1. Review and revise tenure requirements to support faculty trying new forms of teaching.
2. Test students for computer skills before enrollment in an online course.
3. If students lack computer skills to use the course management system or to communicate online, require enrollment in a course to teach the skills in their first semester.
4. Provide instructions within the course management system for students.
5. If use of course management software is required, instructors should either demonstrate their proficiency, or receive training in how to create a user-friendly course websites using their own course materials.
6. Instructors should be taught how to prepare quality written communications that convey information and encourage and support students.
7. Provide instructors with examples of best practices.
8. Limit the size of online classes to ensure that instructors have time for the one-to-one communication necessary with students online.
9. Customize professional development to faculty age and stage.

Recommendations for Further Research

Further research is needed in developing models for courseware that instructors find easy to use within their campus technology infrastructure to help supply resources for the growing number of hybrid and online courses in demand.

Due to the increasing demand for online resources, future research should be done to improve the design of courseware that works well in the classroom and for students at home. Special attention should be give to videos for instructors who teach integrated skills, such as counseling theories and practice. Video provides a unique way to demonstrate case studies in counseling.

Conclusion

This was a study primarily about teaching. The stories of the nine participants revealed much about how they taught, with one aspect being how they used technology in their teaching. Technology is often seen as disembodied, an abstraction. In the context of this study, the technology is not disembodied; instead, it is enmeshed in a very complex environment unique to each instructor. This environment consisted of:

- The instructors' stage of career (Establishment, Maintenance, or Decline);
- The university and the departmental environments in which they worked (state vs. private, the use of campus-wide course management systems, training, technology support, and attitudes toward technology);
- The physical environment, (on campus vs. off-campus vs. distance learning, a city recovering from a hurricane, technology infrastructure in the students' homes);
- The kind of students they taught (half in their 20s, and the other half mid-career adults, mixed gender classes vs. all female);
- The instructor's teaching philosophy, (traditional teacher-centered vs. constructivist/ student-centered);
- Their competing motivations (teaching vs. tenure seeking, pleasing a supervisor by integrating new technologies vs. simplifying lesson planning)
- Politics (competition for students in the region driving policy making).

Each instructor tailored their use of the Online Day software to their own motivations. These motivations ranged from getting tenure, pleasing a supervisor, having ready-made materials to teach an online course, demonstrating one's level of technological expertise in teaching, simplifying testing and grading, and gaining more class time by offering a way for students to watch the course videos outside of class.

A deeper motivation lay in the instructor's reason for choosing a teaching career. Some found gratification in performing and interacting with the students in the classroom. Others felt the need for job security, while others found gratification in having a professional persona, playing a leadership role, and being part of an academic community. Each of these reasons influenced the degree to which they incorporated technology in their teaching.

The two instructors who made the most complete use of the Online Day offerings were motivated to find materials with which to teach the theories course online. Neither had taught the course before they discovered Online Day, so they had not already developed their own course curriculum or teaching methods specific to the course. Therefore, they had fewer obstacles to overcome in adopting Online Day than those professors who had taught the theories course many times before.

The one professor who used Online Day the least was most engaged with tenure seeking activities that took her focus away from the classroom. Her motivation to get tenure precluded her spending a large amount of time learning to use a new computer program. In addition, this instructor classified herself as *computer-phobic*, which indicates that she would need to develop her level of comfort with computers by building computer skills.

Half of the instructors used the online materials as supplementary to their face-to-face teaching; the others split between teaching an online or a hybrid course. Although the course content was widely praised, the computer interface presented problems to the instructors. The interface lacked instructions, and the menu items did not clearly describe the features to which they linked.

The study found that although the courseware presented a number of barriers to the instructors' use, faculty who had committed to teaching the theories course online managed to overcome most of them. Although the quality of the interface was important, environmental and personal factors also influenced to degree to which the courseware was used. Two significant personal factors were the instructors' age and stage of career and their motivation for adopting the courseware. The older instructors who could devote more time to teaching and who were committed to teaching the theories course online were the highest level adopters of the courseware. The younger instructors who were trying to obtain tenure actually used the courseware the least. When they faced obstacles to use, the younger instructors did not persevere.

This information is relevant to institutions of higher education because universities are expanding their reach to students through online learning. Enrollment in online courses has been increasing at close to 20% per year for the past ten years (*Allen & Seaman, 2007*). This study points to the need for universities to help instructors develop their repertoire of teaching skills that will work in the classroom as well as online. Instructors' work loads must be adjusted to allow them time on the job to get training in the use of pedagogy to use with technology, as well as use of the technology itself. The university needs to examine its support to faculty to ensure that pedagogy is taught along with technology skills. The study also points to the need to hire and develop instructors who are flexible in the way they approach teaching, who are interested in learning new teaching methods, and who have the communication skills to support online learning.

Appendix A

INTERVIEW PROTOCOL #1

- Why did you choose to adopt the e-textbook package?
- What do you feel is most important in designing a course using online materials?
- What format is this course, for example online, face-to-face, a combination?
- Describe the context of teaching this course – the organization, the department, the environment, the students, etc.
- What size are your classes?
- What do you consider to be vital to student learning?
- How would you characterize your major strengths as a teacher?
- How long have you taught at the graduate level?
- What experience have you had in using computer technology in teaching?
- What do you anticipate will be the major difficulty for the students?
- What things could be done to offset those problems?
- How were you introduced to teaching with technology?
- Describe your level of computer competence.
- Who has helped you the most in learning to use computers?
- What kind of encouragement do you receive for teaching with technology?
- What are your beliefs about teaching?
- Describe mentors or role models you’ve had for teaching.
- What is your vision for using technology in teaching?

Appendix B

INTERVIEW PROTOCOL #2

- Describe your experience of teaching this course.
- What were your goals for teaching the course?
- How successful were you in your teaching?
- Did you encounter anything unexpected?
- How would you describe the students’ level of engagement?
- Which components of the online material provided did you find useful?
- What were some of the decisions you had to make in designing the course?
- What kind of challenges did you experience?
- Did you make any changes to the course as the semester progressed?
- Can you give me an example of something that worked particularly well?
- What didn’t work well?
- What impact did the e-textbook package have on your teaching?
- What would you do differently?
- How would you advise a colleague who is considering using the e-textbook package?

Appendix C

POTENTIAL FOR RESEARCHER BIAS

The author of the textbook that this study was based on, *Theory and Design in Counseling and Psychotherapy*, was Susan X Day. She introduced me to the context of this study, and served as my research methodologist. Dr. Day had been my instructor for a course in qualitative research at the University of Houston where we first met and where she found out that I was studying instructional technology. She gave my name to the publisher and suggested that I be hired as the part-time telephone advisor to the instructors who had adopted Online Day. I was paid by the publisher, Lahaska Press, for my work teaching the instructors how to use the courseware. I received training in the software from staff at Houghton-Mifflin, the parent company of Lahaska, and talked periodically with the staff of Lahaska and the staff of Intellipro, the software company that created the courseware. Potential for conflict of interest was present due to these factors. However, several mitigating circumstances helped prevent the degree of researcher bias that would invalidate this study.

1. I was encouraged by my advisor, Dr. Melissa Pierson, to focus my research on how the instructors taught, and not on the software.
2. I only spent a total of 1.5 hours working with four of the participants during the period of this study.
3. I used the same interview protocols with each participant, which helped prevent the interviews from becoming instruction sessions.
4. Dr. Day had considerable knowledge of and experience in assisting doctoral students in writing dissertations. Her own thesis in psychology was about how doctoral students worked on dissertations. She was employed by the Educational Psychology Department at the University of Houston to advise doctoral students writing dissertations.
5. I used the Consensual Qualitative Research framework for my methodology (*Hill, Thompson, & Williams, 1997*) which provides a check on researcher bias by incorporating a research team who work closely with the primary researcher, as well as member checks of the themes found.

6. I discussed concerns about researcher bias with my dissertation committee at length in my proposal defense, and they advised me how to proceed.

Since the findings were not supportive of the software package by Day, conflict of interest finally was not an issue.

Appendix D

Email Inquiry to potential participants

Dear (name),

I was given your name by Susan Colehower at Lahaska Press as a recent adopter of the online course, **Theory and Design in Counseling and Psychotherapy** by Susan X Day. I work for Lahaska as technical support for you as you teach this course. I can help you with technical aspects of Online Day, such as how to build the course, or with navigating the site to find some special features, such as the instructor's guide to each chapter which includes reflective questions you could assign the students as topics for the discussion board. I think the case videos are particularly interesting and would generate lots of interest from the students.

I am available by phone at 713-868-1091 (cell - 832-594-1182) or email jeannette.dixon@gmail.com

You may have already been given my contact information by other Lahaska staff, but I wanted to let you know that I'm readily available and eager to help. I have another reason for contacting you directly, namely to ask if you would be willing to help me with my dissertation research.

The leading scholars in the field of instructional technology are calling for studies of teaching practices of online instructors. My dissertation study in instructional technology aims to explore how instructors design a course using online materials, and what kinds of interactions take place within the course.

I am interested in your experiences, no matter whether you teach the course entirely online, or teach a combination of face-to-face and online sessions, or use the online materials to supplement a face-to-face class. I'm limiting participation to adopters of this particular online course package, so as you can see, your involvement is key!

My relationship to you gives me a unique opportunity to study the human side of high-tech teaching and real-life uses of online materials. It also gives you a chance to have some input into the design of this particular online course, because Lahaska and Intellipro (the tech company) will hear your feedback through me. The usual ethical guidelines that protect confidentiality in research studies apply here, so your identity will be disguised. Please contact me if you are curious. I am eager to talk with you.

Will you be attending the ACA conference in Detroit this March? I will be there, and I'd love to meet you and hear your story over a cup of coffee or a drink–my treat!

I look forward to hearing from you.

Sincerely,

Jeannette Dixon

Appendix E

invitation to participate

Dear (adopter's name),

Thank you for your kind response to my email. I promised to send more information to you before mailing you the consent form. My dissertation advisor in the Instructional Technology program at the University of Houston is Dr. Melissa Pierson. If you want to contact her, this is her email address: mpierson@uh.edu. Dr. Pierson is the chair of the program, which is in the Department of Curriculum and Instruction.

Scholars in education are encouraging research into the actual practices of faculty who teach web based courses. This research calls for qualitative methods, which include academic ethnography. Interviews, observation in the field, and collection of documents like written course materials characterize this type of work. Applied to web based instruction, ethnographic methods include becoming acquainted with the online class as it exists within the course management system. Therefore, you are naturally a valuable source of data for my research. Individual telephone interviews and an optional group telephone conference with other faculty adopters will be conducted. In addition, I will ask you to fill out an online survey to collect certain information, such as demographic data. The total amount of your involvement is approximately 2 ½ hours, though I will be happy to talk with you longer if you wish to help me even more.

If you would like to participate, please email me as soon as possible, and I will send you an official consent form to sign. I am hoping to have my participants lined up by January 19th. This project has been reviewed by the University of Houston Committee for the Protection of Human Subjects (713) 743-9204.

I thank you again for taking the time to consider taking part in my dissertation research, and I look forward to getting to know you.

Sincerely,

Jeannette Dixon

Phone: 713-868-1091

Appendix F

Participation Consent Form

UNIVERSITY OF HOUSTON CONSENT TO PARTICIPATE IN CONFIDENTIAL RESEARCH

PROJECT TITLE: Faculty Use of an E-Textbook Package to Teach Counseling Theories: Who, Why, and How?

INVITATION TO PARTICIPATE

You are being invited to participate in a research project conducted by **Jeannette Dixon** from the College of Education, Department of Curriculum and Instruction at the University of Houston. This research project is part of the dissertation for the degree Doctor of Education (Ed. D.) It is being conducted under the sponsorship of Dr. Melissa Pierson.

PARTICIPATION STATEMENT

Your participation is voluntary and you may refuse to participate or withdraw at any time without penalty or loss of benefits to which you are otherwise entitled. You may also refuse to answer any question.

PURPOSE OF THE STUDY

The goal of this research is to better understand actual faculty use of an e-textbook with supplemental online materials that are offered in combination with a course management system. The results may provide significant insights into who these e-textbook adopters are, why they chose to adopt the e-textbook over the print version, and how they have taught with it.

The duration of the entire study will be 11 months.

PROCEDURES

All adopters of the e-textbook package for *Theories and Design in Counseling and Psychotherapy* are invited to participate in this study. A total of approximately 20 subjects are expected to participate.

If you consent to participating, you will be asked to participate in the following procedures:

- Interviews – participate in two individual telephone interviews, one toward the beginning of the semester and one at the end will be recorded. Each session is estimated to take between 30 to 45 minutes.
- Optional conference call - all participants will be invited to participate in a telephone conference call with 3 or 4 other faculty adopters. The call will last between 45 minutes to one hour.
- Answer an online questionnaire.
- Allow the investigator access to the online course you have created using the e-textbook package, and permit occasional data capture from it.
- Allow the investigator access to other materials related to the class that you consider significant.
- Allow the investigator to record phone calls made to her in her role as technical assistant for Lahaska Press in working with the e-textbook materials.

- Possibly participate in a face-to-face interview, in which the investigator would travel to your location.

Your total time commitment, including follow-up, will amount to between 2 ½ and 3 ½ hours, depending on whether or not you participate in the conference call, and/or the face-to-face interview with the investigator.

CONFIDENTIALITY

Your identity will be held in strict confidence.

Every effort will be made to maintain the confidentiality of your participation in this project. Each subject’s name will be paired with a code number by the principal investigator. This code number will appear on all written materials. The list pairing the subject’s name to the assigned code number will be kept separate from all research materials and will be available only to the principal investigator. Confidentiality will be maintained within legal limits.

RISKS/DISCOMFORTS

There are no foreseeable risks to you in participating in this research project.

BENEFITS

While you may not directly benefit from participation, your participation could help the investigator and others in the field to better understand how faculty make use of an e-textbook package to design instruction.

ALTERNATIVES

Participation in this project is voluntary and the only alternative to this project is non-participation.

PUBLICATION STATEMENT

The results of this study will be published as a dissertation, and may be published in professional and/or scientific journals. It may also be used for educational purposes or for professional presentations. The data collected may be used in future research activities, such as a longitudinal study, in which case you will be sent a new consent form. However, at no time will individual subjects be identified.

SUBJECT RIGHTS

1. I understand that informed consent is required of all persons participating in this project.
2. All procedures have been explained to me and all my questions have been answered to my satisfaction.
3. Any risks and/or discomforts have been explained to me.
4. Any benefits have been explained to me.
5. I understand that, if I have any questions, I may contact Jeannette Dixon at 713-868-1091. I may also contact Dr. Melissa Pierson,

faculty sponsor, at 713-743-4961.

6. I have been told that I may refuse to participate or to stop my participation in this project at any time before or during the project. I may also refuse to answer any question.
7. ANY QUESTIONS REGARDING MY RIGHTS AS A RESEARCH SUBJECT MAY BE ADDRESSED TO THE UNIVERSITY OF HOUSTON COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS (713-743-9204). ALL RESEARCH PROJECTS THAT ARE CARRIED OUT BY INVESTIGATORS AT THE UNIVERSITY OF HOUSTON ARE GOVERNED BY REQUIREMENTS OF THE UNIVERSITY AND THE FEDERAL GOVERNMENT.
8. All information that is obtained in connection with this project and that can be identified with me will remain confidential as far as possible within legal limits. Information gained from this study that can be identified with me may be released to no one other than the principal investigator and Dr. Melissa Pierson. The results may be published in scientific journals, professional publications, or educational presentations without identifying me by name.

I HAVE READ (OR HAVE HAD READ TO ME) THE CONTENTS OF THIS CONSENT FORM AND HAVE BEEN ENCOURAGED TO ASK QUESTIONS. I HAVE RECEIVED ANSWERS TO MY QUESTIONS. I GIVE MY CONSENT TO PARTICIPATE IN THIS STUDY. I HAVE RECEIVED (OR WILL RECEIVE) A COPY OF THIS FORM FOR MY RECORDS AND FUTURE REFERENCE.

Study Subject (print name):

Signature of Study Subject:

Date:

I HAVE READ THIS FORM TO THE SUBJECT AND/OR THE SUBJECT HAS READ THIS FORM. AN EXPLANATION OF THE RESEARCH WAS GIVEN AND QUESTIONS FROM THE SUBJECT WERE SOLICITED AND ANSWERED TO THE SUBJECT’S SATISFACTION. IN MY JUDGMENT, THE SUBJECT HAS DEMONSTRATED COMPREHENSION OF THE INFORMATION.

Principal Investigator (print name and title):

Signature of Principal Investigator:

Date:

Appendix G

MEMBER DATA CHECK

Instructions:

1. Please read over the list of themes and let me know if they resonate with your experience. If you agree, just email me stating that. Otherwise,
2. Comment on anything that bothers you using either the “track changes” feature of Word, or email me a note jeannette.dixon@gmail.com, or call me at 713-868-1091.

This is the last step in my research, so I hope you can do this for me. I really appreciate your help!

Jeannette

Themes that emerged from the data:

Instructors’ technology integration

- Reasons for adopting the courseware
    - Access to videos demonstrating the theories
    - Giving students a variety of learning tools
    - To make online teaching easier
- Experience teaching with technology did not determine levels of use
    - The two instructors most experienced with technology did not implement the full range of publisher’s website components
    - Learning new software caused stress to both instructors and students

Online components used

- Online quizzes most frequently used
- Video was the second most used, but required work-arounds
- Discussion board was used by only 3 instructors
- Four instructors used other videos and/or other technologies with the class

Course format and teaching environment

- Two instructors taught online
- Two taught hybrid classes (one on campus, one off campus)
- Four taught face-to-face using online resources to supplement learning
- One did not use the online resources in teaching

Barriers to technology use

- Most of the institutions required instructors to create a course website in the campus-wide course management system, resulting in two websites for the course
- Classrooms varied in their levels of technology in terms of
    - Internet access
    - Computers for instructor
    - Computers for students
    - Computer projector and screen
    - Consistent log-ins for students to the networks and Internet
    - Consistent software from computer to computer
- Course software chosen by publisher was not a good match to the content
    - Lacked menu items for some important course components (i.e. – videos, glossary)
    - Students’ menu contained items that contained no content (i.e. – flashcards)
    - The meanings for menu items on instructors’ site not clearly understood
    - Not enough built-in instructions for instructors trying to set up their courses

- Instructors lacked pedagogy for teaching with online components
    - Some methods of grading discussion board postings were too detailed and time consuming
    - Technology used more to deliver canned content, not as a way for students to interact
    - Differing ideas about importance of instructor participation online with students on the discussion board

Career stage and age

- Early teaching career
    - The young instructors seeking tenure did not have time to become very familiar with the online course content
    - The older instructor who was new to teaching had retired from a long career in private practice; he became very familiar with the course content and used all components of the publisher's website
- Middle teaching career
    - One who had never taught with technology before used all the publisher's website components
    - One who was very advanced technologically used all components except the discussion board
    - One who was new to teaching with technology used the videos and the online quiz components as supplementary to his usual class format
- Late teaching career
    - One instructor very experienced in using technology began the course using the publisher's website, but abandoned it mid-course due to problems caused by student economic levels and insufficient infrastructure
    - Other instructors new to technology taught online using all components by having others do the technical work of setting up the course for him and troubleshooting any problems encountered